



Sixteen Years at the University of Illinois
378.1 105748

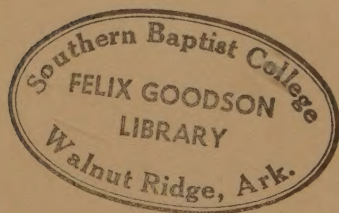


Illinois Univ.
Williams Baptist Coll Library

378
I

1650

Illinois University.
Sixteen years at the
University of Illinois.



LIBRARY

○

CENTRAL COLLEGE

CONWAY - - ARKANSAS

Date Due

[illegible]

L. B. Cat. No. 1137

of

CENTRAL COLLEGE

CONWAY - - ARKANSAS



378
I

SIXTEEN YEARS
AT
THE UNIVERSITY OF ILLINOIS

Illinois University
x

A Statistical Study of the Administration

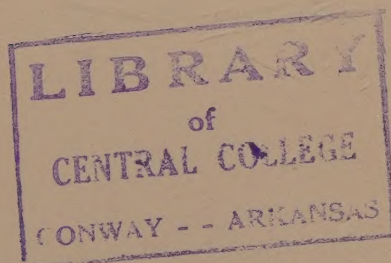
of

PRESIDENT EDMUND J. JAMES

PUBLISHED BY
THE UNIVERSITY OF ILLINOIS PRESS
1920

TABLE OF CONTENTS

Chapter I	The Income of the University.....	7
Chapter II	Land	41
Chapter III	Buildings and Equipment.....	77
Chapter IV	Libraries and Museums.....	100
Chapter V	The Faculty	128
Chapter VI	The Student Body.....	154
Chapter VII	Student Organizations and Activities.....	178
Chapter VIII	Campus Plans	193
Chapter IX	Colleges and Schools.....	199
Chapter X	Summary and Conclusion.....	256



ILLUSTRATIONS

President Edmund Janes James.....	Frontispiece
	(TO FACE PAGE)
Administration and Commerce Buildings.....	16
Natural History and Lincoln Hall.....	32
The Campus in 1870.....	44
Agricultural Buildings	48
Agricultural Experiment Fields.....	53
Agricultural Buildings	64
Chemistry Laboratory	80
Scientific Laboratories	96
Physics, Ceramics, and Transportation Buildings.....	112
Engineering Laboratories	128
Power House and other buildings.....	144
Education and Music Buildings.....	160
Woman's Building and Residence Hall.....	176
Campus and Farms, 1920.....	192
The Campus in 1920.....	194
A Plan for Campus Development.....	196
Medicine, Dentistry, and Pharmacy Buildings.....	208
Auditorium, Armory, and other buildings.....	224
(All the buildings shown were erected, remodelled, or acquired in the period from 1904 to 1920.)	

PREFACE

The text of the following study was prepared by my secretaries beginning with Dr. E. J. Filbey and ending with Mr. Gerald D. Stopp. Dr. V. V. Phelps worked over portions of it very carefully and aside from those already mentioned I am under deep obligations to Mr. L. J. Heath and to Miss Anna V. Whitson for their unwearied attention to detail and their care for accuracy in the figures given.

After all, there will be found many inaccuracies and inconsistencies. In many cases, the university figures do not harmonize and there is no method of making them agree, which shows the necessity of a closer supervision of university accounts. The figures of attendance as kept by the different authorities and even the accounts of moneys expended do not harmonize. It is believed that the present method of accounting will secure substantial agreement.

This book will serve as the starting point of a new and better system of keeping accounts of all sorts relating to the University and it is to be hoped that the next statistical volume will be a marked improvement over this one.

EDMUND J. JAMES.

April 2, 1920.

INTRODUCTION

The following pages contain a brief account of the progress of the University of Illinois during the period from 1904 to 1920—the years of the administration of its fourth president, Dr. Edmund Janes James.

The general plan of the Report will be clear from an examination of the Table of Contents. In the first six chapters an account is given of the growth of the University in financial resources, land, buildings, equipment, libraries, museums, faculty, and students. The seventh chapter summarizes the increase in student organizations and activities. A chapter is added outlining the plans at present under consideration for the future development of the campus; and a brief statement is presented regarding the changes which have taken place during this period in each of the various colleges and schools which constitute the University. Finally a brief summary is appended, recapitulating the outstanding facts contained in the preceding chapters.

In an endeavor to attain some degree of conciseness, facts have been presented through the medium of statistics whenever possible, and comment upon the tables has been reduced to a minimum.

It will of course be recognized that the progress which is after all the most vital in the life of an institution, cannot be expressed in mathematical terms. The real life of a university is something too intangible to grasp and portray. It can be felt rather than seen. We see the manifestations of life as we note changes in the material elements which form the flesh and bones of a living being, and we know that life is there.

It will be observed that in the majority of chapters the account of the period under consideration has been prefaced with a brief statement of the events pertaining to the earlier years of the University, from 1867 to 1904. Essentially, however, the Report is limited to the sixteen years from 1904 to 1920.

CHAPTER I

THE INCOME OF THE UNIVERSITY

The Income of the University of Illinois is derived chiefly from three sources: various appropriations made by the United States Government; appropriations made biennially by the State of Illinois; and the fees paid by students of the University. Within recent years considerable sums have been received also from miscellaneous sources, the most important of which are sales of various products resulting from the regular work of the University, either of experimentation or of instruction. Then, too, several noteworthy gifts have recently been made to the University.

The various appropriations which have been made to the University are as follows:

1. Appropriations by the Federal Government

By the Morrill Land Grant Act of 1862 the national government donated to the State of Illinois scrip for 480,000 acres of public land for the endowment and support of a College of Agriculture and the Mechanic Arts—30,000 acres for each of its senators and representatives in Congress. The sale of this land has brought to the University an endowment fund of approximately \$650,000.

The Hatch Act, approved March 2, 1887, provided for an appropriation of \$15,000 per annum to each state for the purpose of establishing and maintaining agricultural experiment stations in connection with the colleges founded under the act of 1862.

In 1890 a second Morrill Act was passed by Congress, by which there was appropriated for the support of each of the land-grant colleges the sum of \$15,000 for the year ending June 30, 1890, and in each succeeding year a sum larger by \$1000 than the amount of the preceding year until the amount should reach \$25,000 a year. Thereafter \$25,000 was to be paid annually. The sum of \$25,000 has been received by the University each year since 1900.

The Adams Act, approved March 16, 1906, provided for an increased annual appropriation for agricultural experiment stations. Under its provisions the University received \$5000 for the year ending June 30, 1906, and for each of the next five years an increase of \$2000 over the amount of the preceding year. Since 1911 the University has received under this Act \$15,000 annually.

In 1907 Congress provided for the more complete endowment and maintenance of the agricultural colleges by appropriating for their support the sum of \$5000 for the year ending June 30, 1908, and for each succeeding year for four years a sum larger by \$5000 than the amount of the preceding year. Thereafter \$25,000 was to be paid annually under the provisions of this law—known as the Nelson Act. The sum of \$25,000 has been received by the University annually since 1912.

The Smith-Lever Act, approved May 8, 1914, provides for cooperative agricultural extension work by the land-grant colleges and the United States Department of Agriculture. By this act \$480,000 was appropriated by the Federal Government for the year 1914-15, \$1,080,000 for the succeeding year, and for each year thereafter for seven years a sum exceeding by \$500,000 the sum appropriated for each preceding year. Thereafter the appropriation is to be \$4,580,000 a year. Of the first \$480,000 appropriated annually, each of the 48 States receives an equal share or \$10,000. The additional sums appropriated are to be allotted to each State in the proportion which the rural population of each State bears to the total rural population of all the States as determined by the next preceding Federal census. The act provides further that no payment out of the additional sums shall be made in any year to any State until an equal sum has been appropriated for that year by the legislature of such State, or provided by State, county, college, local authority or individual contributions from within the State, for the maintenance of this cooperative agricultural extension work.

The legislature of the State of Illinois, by house joint resolution, assented to the provisions of the Smith-Lever Act March 4, 1915, and the first instalment, \$10,000, was received by the

University of Illinois during the fiscal year 1914-15. Of the sums appropriated in excess of \$480,000, the State of Illinois will receive 4.38% each year until the figures for the fourteenth United States census are available. For the year 1915-16 the total sum payable to this State under the act was \$36,282.20, for 1916-17 \$58,184.03, and for 1917-18 \$80,085.86. The "equal sum" to be provided by some organization within the State of Illinois is at present furnished by individual subscriptions amounting to nearly \$60,000 and by twenty-three county organizations which together contribute annually to this work a total of about \$26,000. Also the University is spending each year between \$20,000 and \$30,000 in the work of agricultural extension.

The Smith-Hughes Act approved February 23, 1917, provides for the promotion of vocational education and the preparation of teachers of vocational subjects. By this act the Federal Government appropriated for the year ending June 30, 1918, the sum of \$500,000 and for each succeeding year up to and including that ending June 30, 1925, a sum exceeding by \$250,000 the appropriation of the next preceding year. Beginning July 1, 1925, the sum is to be fixed at \$3,000,000 per annum. These appropriations will be allotted to each state in the proportion which its rural population bears to the total rural population in the United States according to the last preceding United States census, on the condition that the allotment of funds to any state shall not be less than a minimum of \$5,000 for any fiscal year up to and including that ending June 30, 1923, nor less than \$10,000 for any fiscal year thereafter, and that for each Federal dollar so expended for the maintenance of such vocational training, the State or local community or both shall expend an equal amount for the same purpose.

The General Assembly of Illinois having adjourned before these funds were made available, Governor Lowden on November 14, 1917, accepted the provisions of the Smith-Hughes Act, appointed the State Treasurer custodian of such money as should be received therefrom, and created a State Board for Vocational Education, consisting of the Director of Registration and Education, Chairman, the Superintendent of Public

Instruction, the Director of Agriculture, the Director of Labor, and the Director of Trade and Commerce. Since the Board had no State appropriation with which to undertake its work, it requested the University of Illinois to advance sufficient funds for the training of teachers in vocational branches. This the Board of Trustees agreed to do, and accordingly the University proceeded with the work. Of the \$11,290.96 expended thereon during the year 1917-18, \$5,645.48 of Federal money was refunded by the State Board for Vocational Education.

The sums received as a result of the Morrill, the Nelson, and the Smith-Hughes acts are paid annually by the Treasurer of the United States to the State Treasurer. Each General Assembly enacts a law providing that the sums so received by the State Treasurer shall immediately be payable into the Treasury of the University upon the order of its Board of Trustees. The income from the Hatch, the Adams, and the Smith-Lever acts is paid directly to the University Treasurer by the Treasurer of the United States.

The income of the University of Illinois from each of the federal grants may be seen in the following table.

It is worthy of note that the first of these federal appropriations for the support of the land-grant colleges was brought about largely as a result of the efforts of a citizen of this state—Professor Jonathan Baldwin Turner of the Illinois College at Jacksonville; and that although a similar bill had been vetoed by President Buchanan in 1859,¹ a president from Illinois, Abraham Lincoln, affixed his signature to the bill of 1862.

The fact should be added, that the appropriation of 1862 to the land-grant colleges was not the first appropriation made by the Federal government for the support of higher education in Illinois. By an act of Congress dated March 26, 1804, the Secretary of the Treasury was directed to locate in each of three districts in the Indiana Territory one entire township for the use of a seminary of learning. This gave Indiana, Illinois and Michigan each one seminary township.² By the

¹Ill. School Report 1881-2, p. cxli

²Ill. School Report 1881-2, p. cxxxi

1867-1916

The Income of the University

11

Year	Interest on Endowment Fund	Hatch	Morrill	Adams	Nelson	Smith-Lever	Smith-Hughes	Total
1867-68	\$ 3,750.00							\$ 3,750.00
1868-69	14,865.00							14,865.00
1869-70	18,390.00							18,390.00
1870-71	20,610.00							20,610.00
1871-72	20,894.00							20,894.00
1872-73	22,680.00							22,680.00
1873-74	25,110.00							25,110.00
1874-75	28,331.70							28,331.70
1875-76 ¹	54,229.50							54,229.50
1876-77	29,368.25							29,368.25
1877-78	25,695.00							25,695.00
1878-79	23,170.00							23,170.00
1879-80	21,300.00							21,300.00
1880-81	20,960.00							20,960.00
1881-82	18,255.00							18,255.00
1882-83	17,247.17							17,247.17
1883-84	17,750.00							17,750.00
1884-85	19,167.50							19,167.70
1885-86	23,230.00							23,230.00
1886-87	26,064.25							26,064.25
1887-88	24,713.75							24,713.75
1888-89	25,490.00	\$15,000.00						40,490.00
1889-90	27,316.50	15,000.00	\$15,000.00 ²					57,316.50

¹Period of eighteen months, due to change in fiscal year.

²The sum of \$15,000 for the fiscal year ending June 30, 1890, was actually received during the fiscal year 1890-91 (of the University), as also was the sum of \$16,000 for 1890-91. In like manner the sums of \$17,000 for 1891-92 and \$18,000 for 1892-93 were received during the fiscal year 1891-92. (Rept., Univ. of Ill., 1892, pp. 132, 282). At that time the fiscal year of the University extended from September 1 to August 31. This was changed in 1895-96, to end June 30. According to the University records, the payments of \$19,000, \$20,000, and \$21,000 were each apparently received during the year previous to that indicated in the table.

Year	Interest on Endowment Fund	Hatch	Morrill	Adams	Nelson	Smith-Lever	Smith-Hughes	Total
1890-91	\$24,475.35	\$15,000.00	\$16,000.00					\$55,475.35
1891-92	26,954.40	15,000.00	17,000.00					58,954.40
1892-93	27,430.95	15,000.00	18,000.00					60,430.95
1893-94	27,869.40	15,000.00	19,000.00					61,869.40
1894-95	27,032.12	15,000.00	20,000.00					62,032.12
1895-96 ^a	8,838.11	15,000.00	21,000.00					44,838.11
1896-97	23,241.10	15,000.00	22,000.00					60,241.10
1897-98	14,366.95	15,000.00	23,000.00					52,366.95
1898-99	24,961.64	15,000.00	24,000.00					63,961.64
1899-1900	44,200.26	15,000.00	25,000.00					84,200.26
1900-01	27,996.08	15,000.00	25,000.00					67,996.08
1901-02	34,425.41	15,000.00	25,000.00					74,425.41
1902-03	32,084.40	15,000.00	25,000.00					72,084.40
1903-04	34,223.37	15,000.00	25,000.00					74,223.37
1904-05	33,000.26	15,000.00	25,000.00					73,000.26
1905-06	33,072.05	15,000.00	25,000.00	12,000.00				73,072.05
1906-07	32,409.62	15,000.00	25,000.00	8,864.38				84,409.62
1907-08	32,555.24	15,000.00	25,000.00	5,000.00				86,419.62
1908-09	32,480.80	15,000.00	25,000.00	11,000.00				93,480.80
1909-10	32,414.44	15,000.00	25,000.00	13,000.00				100,414.44
1910-11	32,467.68	15,000.00	25,000.00	15,000.00				107,467.68
1911-12	32,464.32	14,950.80	25,000.00	14,987.24				112,402.36
1912-13	32,464.34	14,564.95	25,000.00	14,987.24				112,016.53
1913-14	32,463.24	15,000.00	25,000.00	15,000.00				112,463.24
1914-15	32,462.04	15,000.00	25,000.00	15,000.00		10,000.00		122,462.04
1915-16	32,450.34	15,000.00	25,000.00	15,000.00		36,282.20		148,732.54
1916-17	32,450.66	15,000.00	25,000.00	15,000.00		58,184.03		170,634.69
1917-18	32,450.66	15,000.00	25,000.00	15,000.00		80,085.86	5,645.48	198,182.00
1918-19	32,450.66	15,000.00	25,000.00	15,000.00		101,987.69	14,720.79	229,159.14
1919-20	32,450.66	15,000.00	25,000.00	15,000.00		123,889.52	14,265.00	250,605.18
TOTAL	\$1,427,194.17	\$479,515.75	\$720,000.00	\$194,838.86	\$275,000.00	\$410,429.30	\$34,631.27	\$3,541,609.55

^aEstimated.^aPeriod of ten months, due to change in fiscal year.

act of Congress of April 18, 1818, by which the people of Illinois Territory were allowed to form a constitution and state government, one-half of one per cent of the net proceeds of the lands lying within the state, which should be sold by Congress after January 1, 1819, was to be "exclusively bestowed on a college or university." By the same act it was provided "That thirty-six sections, or one entire township, which shall be designated by the President of the United States, together with the one heretofore reserved for that purpose, shall be reserved for the use of a seminary of learning, and vested in the legislature of said State, to be appropriated solely to the use of such seminary by the said legislature."³

The income from the college and seminary funds was annually borrowed by the state government from 1829 until 1857. Sometimes this money was used for the support of the common school system, but it appears to have been placed frequently in the general fund of the state to obviate a levy of the necessary taxes for the operation of the state government.⁴

When the establishment of the Illinois State Normal University was authorized in 1857 the interest on the college and seminary funds was appropriated to the support of that institution. This income has been shared equally with the Southern Illinois Normal University since the establishment of the latter in 1869.⁵ The income of the seminary funds which had been borrowed up to 1857 was never returned by the state, but the borrowed income of the college fund was restored by an act passed in 1861.⁶

No part of the proceeds of either the college or the seminary funds has ever been received by the University of Illinois.

It is to be noticed that in the case of each of the various federal grants made from 1862 on, it was the purpose of the general government to require the states to cooperate in the maintenance of the work of the institution established as a

³Ill. School Report, 1881-2, p. cxxiii

⁴Ill. School Report, 1881-2, pp. cxxxiii and cxxxiv

⁵Ill. School Report, 1881-2, p. cxxxv

⁶Ill. School Report, 1881-2, p. cxxxvii

result of these grants. This is evident in the first place from the fact that the appropriations made by the Federal government to the University were made primarily for the support of instruction in agriculture and the mechanic arts and of agricultural investigation, although "other scientific and classical studies" were not to be excluded from the curriculum, and military tactics was specifically included. If the institution in any state was to become a university, offering courses in every field of study, the money for the greater part of its support must come from the state itself. In the second place, a considerable measure of support on the part of the state was demanded for carrying on even the work of the agricultural and the engineering departments, for every bill granting federal support for this work included a provision to the effect that the state must furnish such facilities as would make the work possible. Thus in the original grant of 1862 not more than 10% of the fund might be used for the purchase of land for a site or for farms; no part of the fund or of the interest on the fund might be used for the purchase, erection or repair of buildings. The state, then, must provide and maintain the buildings required by the college. In the Act of 1887 by which the agricultural experiment stations were established it was stipulated that not over 20% of the first annual appropriation of \$15,000 might be used for buildings, and not more than 5% of subsequent appropriations. The Morrill Act of 1890 provided that no part of the money then appropriated should be used for buildings—directly or indirectly, while the Adams Act of 1906 permitted the use of not over 5% of the appropriation for this purpose. The Nelson amendment of 1907 and the Smith-Hughes Act of 1917 fixed the same limitations as the acts of 1862 and 1890. It became necessary, therefore, for the citizens of each state to provide a due proportion of the equipment and maintenance of these institutions. Illinois was slow to accept this obligation, but beginning with small annual appropriations it has contributed more generously as the years have passed until it has made possible the establishment and maintenance

of the various necessary colleges and schools of a true university.

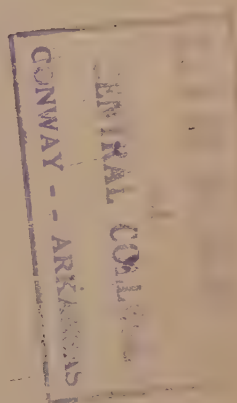
2. *Appropriations by the State of Illinois*

The various sums which have been appropriated by the State to the University of Illinois from the establishment of the University to the present time are shown in the following table:

APPROPRIATIONS OF THE STATE TO THE UNIVERSITY
OF ILLINOIS

1869-1920

Biennium		
1869-71	\$ 60,000.00	
1871-73	130,500.00	
1873-75	52,050.00	
1875-77	11,500.00	
1877-79	69,000.00	
1879-81	24,500.00	
1881-83	41,300.00	
1883-85	54,500.00	
1885-87	53,500.00	\$ 496,850.00
1887-89	54,500.00	
1889-91	68,650.00	
1891-93	135,200.00	
1893-95	295,700.00	
1895-97	427,000.00	
1897-99	449,164.31	
1899-1901	494,400.00	
1901-03	804,330.01	
1903-05	1,152,400.00	3,881,344.32
1905-07	1,414,535.00	
1907-09	2,222,790.00	
1909-11	2,313,500.00	
1911-13	3,399,300.00	
1913-15	4,500,000.00	
1915-17	5,000,000.00	
1917-19	4,800,000.00	23,650,125.00
1919-21	5,348,000.00	28,998,125.00
Total 1869-1921		\$33,376,319.32



The legislature of 1867, which authorized the establishment of the University and fixed its site at Urbana, made no appropriation for its support. The legislature of 1869, however, made an appropriation of \$60,000 to the University, and each succeeding legislature has accepted the obligation of contributing to its maintenance. The appropriations may be grouped in three periods:

For the first eighteen years of the life of the University, or until 1885, the appropriations were quite irregular. There was no uniformity of increase or of decrease from one biennium to the next. The sum of all appropriations for this period was \$496,850—an average of \$55,206 per biennium, or \$27,603 per annum. The sums ranged from \$11,500 in 1875 to \$130,500 in 1871.

For the next eighteen years, from 1886 to 1904, the total sum appropriated by the State to the University was \$3,881,344.32, an average of \$431,260 per biennium, or \$215,630 per annum. There was a steady biennial increase from \$54,500, appropriated in 1887, to \$1,152,400, appropriated in 1903.

For the next fifteen years, from 1904 to 1919, the total sum appropriated by the State of Illinois to the University was \$28,998,125, an average of \$3,624,765.62 per biennium, or \$1,812,382.81 per annum. There was again a steady biennial increase in the appropriations, the sums advancing from \$1,414,535, appropriated in 1905, to \$5,000,000, appropriated in 1915, falling however to \$4,800,000 in 1917. It is noteworthy that the sum appropriated in 1913—\$4,500,000—was over \$120,000 greater than the entire sum of all the appropriations made by the State of Illinois to the University during the thirty-six years from its foundation in 1867 to 1903—\$4,378,194.32; and that the sums appropriated in 1915 and 1917, namely \$5,000,000 and \$4,800,000, exceeded by \$620,000 and \$420,000 respectively, the sum total of all the appropriations made by the State to the University during the first thirty-six years of the latter's existence.

The increase in the successive appropriations made during the past fifteen years is seen in the next table.



Administration



Commerce

APPROPRIATIONS OF THE STATE TO THE UNIVERSITY
OF ILLINOIS

1905-19

Biennium	Appropriation	Increase over appropriation of preceding biennium	Rate of Increase
1905-07	\$1,414,535.00	\$ 262,135.00	23%
1907-09	2,222,790.00	808,255.00	57%
1909-11	2,313,500.00	90,710.00	4%
1911-13	3,399,300.00	1,085,800.00	47%
1913-15	4,500,000.00	1,100,700.00	32%
1915-17	5,000,000.00	500,000.00	11%
1917-19	4,800,000.00	(-200,000.00) [†]	(4%) [†]
1919-21	5,348,000.00	548,000.00	11%

Average rate of increase over each preceding biennium.....	24%
Increase of appropriation of 1917 over that of 1903.....	316%
Total appropriations by state 1905-1919.....	\$28,998,125.00
Total appropriations by state 1869-1903.....	4,378,194.32
Excess of appropriations 1905-19 over 1869-1903.....	24,619,930.68

The preceding tables do not include certain sums appropriated by the legislature to various organizations connected more or less closely with the University, although the funds of such organizations were for a time administered by the Board of Trustees of the University.

The State Laboratory of Natural History was removed to the campus of the University of Illinois in 1885. From that time until 1899 the sums appropriated for its work were payable "upon the order of the president of the Board of Trustees of the University of Illinois, attested by its secretary and with the corporate seal of the University." During this period the following sums were appropriated to the Laboratory:

[†]Decrease

APPROPRIATIONS TO THE STATE LABORATORY OF
NATURAL HISTORY

1885-1899

Biennium	Appropriation
1885-1887	\$ 18,000.00
1887-1889	15,100.00
1889-1891	11,500.00
1891-1893	12,000.00
1893-1895	14,100.00
1895-1897	19,800.00
1897-1899	22,000.00
Total	\$112,500.00

In like manner the sum of \$50,000 appropriated for the work of the State Entomologist was administered by the University for the biennium 1907-1909.

In 1911 additional duties were assigned by the General Assembly to the State Water Survey, which had been established at the University of Illinois in 1899. The sum of \$30,000 was appropriated in 1911 for carrying on the work of investigation then proposed. This amount was increased to \$43,000 in 1913 and to \$52,000 in 1915, making a total of \$125,000 thus far appropriated for regular and additional work. The trustees of the University were charged with the administration of these funds, likewise. (To carry on the original work of water analysis for which the Survey was created at the University, a total of \$65,000 was appropriated to the University itself during the period from 1899 to 1913. This sum is included in the table showing the appropriations of the State to the University, but the \$125,000 thus far appropriated directly to the State Water Survey has not been so included.)⁸

The Illinois Miners' and Mechanics' Institutes were authorized by the General Assembly in 1911. No appropriation for this work was made, however, until 1913, when \$15,000 per annum was appropriated for the next two years. The Board of Trustees of the University was charged with the administration of this fund.

⁸The State Water Survey was in 1917 made a division of the State Department of Registration and Education by the Fiftieth General Assembly

The federal land-grant act of 1862 provided that if any portion of the fund created by that act, or of the interest thereon, should be diminished or lost, it must be replaced by the state to which it had belonged. Accordingly, upon the defalcation of the treasurer of the University in 1897, the State assumed the liability for the endowment fund and has since paid interest thereon semi-annually at the rate of 5% per annum. The appropriation of this interest could properly be classed either as a State or a Federal appropriation, but has been considered in this chapter as an item of the income from the Federal government—the original source of this fund. It was therefore not included in the table of state appropriations, although two special appropriations, \$92,949.38 and \$5,000, respectively, necessitated by the loss of the working income in 1897 through the defalcation already mentioned, were so included.

The sums thus far appropriated by the State as interest on the endowment fund are as follows:⁹

INTEREST ON ORIGINAL ENDOWMENT FUND—1897-1917

1897	\$24,250.03
1899	53,013.51
1901	49,921.44
1903	60,149.16
1905	62,091.16
1907	63,580.42
1909	64,661.23
1911	64,880.36
1913	64,841.28
1915	64,901.00
1917	64,901.32
1919	64,901.32
Total	\$702,092.23

⁹The phrase "or as much thereof as may be necessary" is regularly included in the act by which the appropriation is made. The sums actually received by the University have usually been somewhat less than those represented by the above figures.

The various purposes for which appropriations have been made by the State to the University since the organization of the University are indicated in the following table:

STATE APPROPRIATIONS TO THE UNIVERSITY OF ILLINOIS
1867-1921

Appropriation For	1867-1903 *	1905-1921	Total 1867-1921
Administrative Offices		\$ 157,000.00	\$ 157,000.00
Agricultural Building\$	162,830.01		162,830.01
Agriculture	132,500.00	715,800.00	848,300.00
Animal Husbandry Building..		80,000.00	80,000.00
Armory	10,000.00	100,000.00	110,000.00
Auditorium		100,000.00	100,000.00
Biological Station	5,500.00		5,500.00
Buildings		700,000.00	700,000.00
Buildings and Grounds, Main- tenance	79,500.00	423,690.00	503,190.00
Buildings, Minor	8,500.00	33,000.00	41,500.00
Cabinets and Collections.....	28,500.00	20,000.00	48,500.00
Ceramics		80,000.00	80,000.00
Ceramics Building		21,000.00	21,000.00
Chemistry	33,000.00	80,000.00	113,000.00
Chemistry Laboratory	154,714.93		154,714.93
Commerce, Instruction in....	26,400.00	166,000.00	192,400.00
Commerce Building		125,000.00	125,000.00
Crop Experiments	40,000.00	120,000.00	160,000.00
Dairy Barn		10,000.00	10,000.00
Dairy Investigations	40,000.00	120,000.00	160,000.00
Defalcation Fund	92,949.38		92,949.38
Drains, Fences and Repairs...	18,000.00	25,000.00	43,000.00
Electrical Laboratory and Heat- ing Plant	51,000.00		51,000.00
Engineering College and Sta- tion	240,000.00	640,000.00	880,000.00
Engineering Hall	165,000.00		165,000.00
Equipment		600,000.00	600,000.00
Farm Lands		31,600.00	31,600.00
Feeding Experiments (See Live Stock Investigations)			
Fire Protection	11,000.00	12,000.00	23,000.00
Floriculture		47,000.00	47,000.00
General and Contingent Ex- penses		950,000.00	950,000.00

Appropriation For	1867-1903	1905-1921	Total 1867-1921
General Departments		230,000.00	230,000.00
Graduate School		300,000.00	300,000.00
Glasshouse, rebuilt		30,000.00	30,000.00
Gymnasium, Men's	3,000.00	13,000.00	16,000.00
Gymnasium, Wood Shop, etc... ..	91,000.00		91,000.00
Heating Plant	20,500.00	115,035.00	135,535.00
Horticulture	63,500.00	120,000.00	183,500.00
Household Science		30,000.00	30,000.00
Instructional Work		2,563,000.00	2,563,000.00
Laboratories, General	41,600.00	26,000.00	67,600.00
Land (City Lots).....	8,500.00	15,000.00	23,500.00
Land, Buildings and Equip- ment		2,500,000.00	2,500,000.00
Law Building and Stacks.....	10,500.00	25,000.00	35,500.00
Law, College of.....		123,000.00	123,000.00
Legal Proceedings	5,000.00		5,000.00
Library and Apparatus.....	129,800.00	175,000.00	304,800.00
Library Building	160,000.00		160,000.00
Lincoln Hall		250,000.00	250,000.00
Live Stock Investigations....	82,000.00	200,000.00	282,000.00
Live Stock Specimens.....		22,500.00	22,500.00
Maintenance and Operation... ..	1,815,400.00	7,000,000.00	8,815,400.00
Military Barns		25,000.00	25,000.00
Mining Building		25,000.00	25,000.00
Mining Engineering	4,000.00	45,000.00	49,000.00
Mines Investigation		10,000.00	10,000.00
Music, School of.....	10,000.00	18,000.00	28,000.00
Natural History Hall.....	76,000.00	150,000.00	226,000.00
Observatory	15,000.00		15,000.00
Office Expenses, Departmental..		250,000.00	250,000.00
Operating		600,000.00	600,000.00
Operating Supplies and Ex- penses		175,000.00	175,000.00
Pavements and Walks.....	37,300.00	13,000.00	50,300.00
Pharmacy, School of.....		50,000.00	50,000.00
Physical Plant		450,000.00	450,000.00
Physics	6,000.00		6,000.00
Physics Building		250,000.00	250,000.00
Printing Office, Equipment....	500.00		500.00
Repairs		200,000.00	200,000.00
Research and Scientific Depts..		200,000.00	200,000.00
Salaries and Wages.....		6,250,000.00	6,250,000.00
School Supplies		865,000.00	865,000.00
Shop Practise	51,000.00	42,000.00	93,000.00
Shops and Drill Hall.....	26,250.00		26,250.00

Appropriation For	1867-1903	1905-1921	Total 1867-1921
Social and Political Science (See Commerce, Instruction in)			
Soil Investigations	70,000.00	350,000.00	420,000.00
Soil Maps		50,000.00	50,000.00
Sugar Beet Investigations....	6,000.00		6,000.00
Taxes on Nebraska and Minne- sota Lands	63,100.00		63,100.00
Teachers (additional) and In- struction at Institute.....	24,000.00	24,000.00	48,000.00
Telephone Exchange	3,000.00	7,500.00	10,500.00
Engineering (Transportation)			
Building and Grounds.....		200,000.00	200,000.00
Traveling Expenses		100,000.00	100,000.00
University Hall	121,050.00		121,050.00
Vaccine Laboratory	12,800.00		12,800.00
Veterinary Biological Lab. Oper- tion		23,000.00	23,000.00
Veterinary Science	2,000.00	30,000.00	32,000.00
Water Station	20,000.00	16,000.00	36,000.00
Water Survey	20,000.00	45,000.00	65,000.00
Woman's Building	80,000.00	140,000.00	220,000.00
TOTAL	\$4,378,194.32	\$29,448,125.00	\$33,826,319.32

The appropriations by the State to the University from 1905 to 1920 are given in detail in the seven tables which follow:

STATE APPROPRIATIONS FOR 1905-07

Purpose	Amount
Agricultural College	\$ 100,000.00
Auditorium	100,000.00
Cabinets and Collections.....	4,000.00
Ceramics	10,000.00
Chemistry	20,000.00
Commerce, Instruction in.....	16,000.00
Crop Experiments	30,000.00
Dairy Investigation	30,000.00
Drains, Fences and Repairs.....	10,000.00
Engineering College and Station.....	150,000.00
Fire Protection	3,000.00
Heating Plant	35.00

Purpose	Amount
Horticulture	30,000.00
Laboratories (General)	6,000.00
Law, College of	10,000.00
Library	25,000.00
Live Stock Investigation	50,000.00
Music, School of	6,000.00
Operating Expense	700,000.00
Shop Practise	10,000.00
Soil Investigation	50,000.00
Teachers (additional) and Instruction at Institutes	12,000.00
Telephone Exchange	1,500.00
Water Station	3,000.00
Water Survey	8,000.00
Woman's Building	15,000.00
Purchase of City Lots	15,000.00

Total \$1,414,535.00

STATE APPROPRIATIONS FOR 1907-09

Purpose	Amount
Agricultural College	\$ 100,000.00
Buildings and Grounds	28,690.00
Cabinets and Collections	4,000.00
Ceramics	15,000.00
Chemistry	20,000.00
Commerce, Instruction in	50,000.00
Crop Experiments	30,000.00
Dairy Investigation	30,000.00
Drains, Fences and Repairs	10,000.00
Engineering College and Station	150,000.00
Farm Land	11,600.00
Fire Protection	3,000.00
Floriculture	15,000.00
Graduate School	100,000.00
Heating Plant	35,000.00
Horticulture	30,000.00
Household Science	20,000.00
Laboratories (General)	6,000.00
Law, College of	30,000.00
Library	50,000.00
Live Stock Investigation	50,000.00
Music, School of	6,000.00
Natural History Building (addition)	150,000.00
Operating Expense	900,000.00

Purpose	Amount
Pharmacy, School of.....	10,000.00
Physics Hall	250,000.00
Shop Practise	10,000.00
Soil Investigation	50,000.00
Teachers (additional) and Instruction at Institutes.....	12,000.00
Veterinary Science	30,000.00
Telephone Exchange	1,500.00
Water Station	3,000.00
Water Survey	12,000.00
Total	<u>\$2,222,790.00</u>

STATE APPROPRIATIONS FOR 1909-11

Purpose	Amount
Agricultural College	\$ 100,000.00
Buildings and Grounds	35,000.00
Cabinets and Collections.....	4,000.00
Ceramics	25,000.00
Chemistry	20,000.00
Crop Experiments	30,000.00
Dairy Investigation	30,000.00
Drains, Fences and Repairs.....	5,000.00
Engineering College and Station.....	160,000.00
Fire Protection	3,000.00
Floriculture	16,000.00
Graduate School	100,000.00
Gymnasium	8,000.00
Heating and Lighting Plant.....	50,000.00
Horticulture	30,000.00
Household Science	5,000.00
Laboratories, General	6,000.00
Law, College of.....	33,000.00
Law Library Stacks.....	10,000.00
Library	50,000.00
Lincoln Hall	250,000.00
Mining Engineering	15,000.00
Music, School of.....	6,000.00
Operating Expense	1,050,000.00
Pavements and Walks.....	5,000.00
Pharmacy, School of.....	20,000.00
Shop Practise	10,000.00
Social and Political Science.....	50,000.00
Soil Investigation	120,000.00
Stock Investigation	50,000.00

Purpose	Amount
Telephone Exchange	1,500.00
Water Station	6,000.00
Water Survey	10,000.00
Total	\$2,313,500.00

STATE APPROPRIATIONS FOR 1911-13

Purpose	Amount
Agricultural College	\$ 415,800.00
Agronomy Greenhouse	9,000.00
Animal Husbandry Building	80,000.00
Armory	100,000.00
Buildings and Grounds.....	50,000.00
Cabinets	8,000.00
Ceramics	30,000.00
Ceramics Building	21,000.00
Chemistry	20,000.00
Clinic Building	5,000.00
Cold Storage	9,000.00
Commerce Building	125,000.00
Crop Experiments	30,000.00
Dairy Barn	10,000.00
Dairy Investigations	30,000.00
Engineering Building and Grounds.....	200,000.00
Engineering College and Station.....	180,000.00
Farm Mechanics Building.....	8,000.00
Fire Protection	3,000.00
Floriculture	16,000.00
Glass House	30,000.00
Graduate School	100,000.00
Gymnasium	5,000.00
Heating and Lighting Plant.....	30,000.00
Horticulture	30,000.00
Household Science	5,000.00
Laboratories, General	8,000.00
Law Building	15,000.00
Law, College of.....	50,000.00
Library	50,000.00
Live Stock Specimens.....	22,500.00
Mining Building (additional equipment).....	25,000.00
Mining Engineering	30,000.00
Mines Investigation	10,000.00
Operating Expenses	1,150,000.00
Pavements and Walks.....	8,000.00
Pharmacy, School of.....	20,000.00

Purpose	Amount
Purchase of Farm Lands.....	20,000.00
Sheep Building	2,000.00
Shop Practise	12,000.00
Social and Political Science.....	50,000.00
Soil Investigations	130,000.00
Soil Maps	50,000.00
Stock Investigations	50,000.00
Telephone Exchange	3,000.00
Water Station	4,000.00
Water Survey	15,000.00
Woman's Building, Addition.....	125,000.00
Total .	\$3,399,300.00

STATE APPROPRIATIONS FOR 1913-15

Purpose	Amount
Maintenance, Equipment and General Operating Expenses..	\$3,200,000.00
Land, Buildings and Equipment.....	1,300,000.00
Total .	\$4,500,000.00

STATE APPROPRIATIONS FOR 1915-17

Purpose	Amount
Land, Buildings and Equipment.....	\$ 900,000.00
Expenses of Administrative Offices.....	157,000.00
Expenses of General Departments.....	230,000.00
Expense of Instructional Work.....	2,563,000.00
Expense of Research and Scientific Departments.....	200,000.00
Maintenance and Operation of Physical Plant.....	450,000.00
General and Contingent Fund.....	500,000.00
Total .	\$5,000,000.00

STATE APPROPRIATIONS FOR 1917-19

Purpose	Amount
Salaries and Wages.....	\$2,950,000.00
Departmental Office Expenses.....	100,000.00
Traveling Expenses	50,000.00
Operating Supplies and Expenses.....	125,000.00
School Supplies	415,000.00
Repairs on Buildings, Grounds and Equipment.....	110,000.00
Equipment	300,000.00
Buildings	500,000.00
Reserve and Contingencies.....	250,000.00
Total .	\$4,800,000.00

STATE APPROPRIATIONS FOR 1919-21

A. *From Receipts from the*

University Mill Tax

1. Salaries and Wages.....	\$3,300,000.00
2. Office Expense	150,000.00
3. Traveling Expense	50,000.00
4. Operating	600,000.00
5. Repairs	200,000.00
6. Equipment	300,000.00
7. Buildings	200,000.00
8. Contingent	200,000.00

Total Mill Tax.....\$5,000,000.00

B. *From General Revenue of the State*

1. Land and Buildings.....	\$ 300,000.00
2. Veterinary Biological Laboratory Operation.....	23,000.00
3. Military Barns	25,000.00

Total Appropriations\$5,348,000.00

It should be noted that the appropriations for 1913-15, for 1915-17, for 1917-19, and for 1919-21, totaling \$4,500,000, \$5,000,000, \$4,800,000, and \$5,348,000 respectively, represented the estimated proceeds of the one-mill tax for the University first collected in 1912.

The progress of a State University is to be judged not so much by the size of the appropriations made to it by successive legislatures as by the manner in which such appropriations are utilized. Nevertheless a steady increase in the biennial appropriations, obtained as these are from groups of men the personnel of which is constantly changing, affords reasonably certain evidence that the University has won the confidence of the greater number of the citizens of the State, that it is developing in accordance with their desires, and that it is meeting the various obligations which in increasing numbers are being laid upon it year after year. The voting by the legislature of 1911 of an annual mill tax for the support of the University of Illinois is a further unmistakable expression of this confidence. The act in full is as follows:

AN ACT to Provide by State Tax for a Fund for the Support and Maintenance of the University of Illinois.

Section 1. Be it enacted by the People of the State of Illinois represented in the General Assembly: That there shall be levied and collected for the year 1912 and annually thereafter at the same time and in the same manner that State taxes are collected, a one mill tax for each dollar of the assessed valuation of the taxable property of this State to be paid into the treasury of the State and set apart as a fund for the use and maintenance of the University of Illinois.

Section 2. Such fund when so collected, paid in and set apart, shall remain in the treasury of the State until appropriated to the use of the said University of Illinois by act of the General Assembly in accordance with section 18, article 4, of the Constitution of this State.

Approved June 10, 1911.¹⁰

The passage of this Act makes it possible for the authorities of the University to adopt and carry out a definite administrative and educational policy. It has, however, become evident that with the rapid growth of the University and with the increasing demands made upon it, the mill tax will not alone yield a sufficient sum to provide both for the ordinary operating expenses and for the erection of the buildings now urgently needed by the several colleges of the University.

The lower estimate of the receipts from this tax and the consequently lower appropriation for the biennium 1917-19 was due mainly to the fact that the equalized assessment of all taxable property in Illinois for the year 1916 was arbitrarily reduced to \$2,502,086,976, a sum \$54,571,224 less than the corresponding amount for 1915. This was a decrease of over two per cent, whereas for the preceding six years there had been an average increase of nearly three per cent. Because of this reduction and in view of the fact that for the biennium 1915-17 the receipts from the mill tax had fallen below the \$5,000,000 appropriated in 1915 for that period, the Board of Trustees of the University asked of the legislature for the biennium 1917-19 a sum from the mill tax \$200,000 less than the amount appropriated for the preceding biennium. An additional sum of \$2,000,000 for the biennium 1917-19, re-

¹⁰Laws of Illinois 1911, pp. 484-5

quired for the inauguration of a comprehensive building plan for the next ten years, was not granted by the legislature.

3. Total Income of the University

The total receipts of the University from all sources for each year from 1904 to 1917 are shown in the following table. It should be noted that in this table the sums received from the State of Illinois represent not only all sums appropriated directly to the University for University purposes, but also all other funds with the administration of which the Trustees of the University were charged.

It will be observed that the income of the University and related departments from each of the various sources—United States Government, State of Illinois, and fees, sales, etc.,—showed a marked increase during the sixteen years from 1904 to 1920. The income proper of the University exceeded \$1,000,000 for the first time in the year 1905-06. Six years later it went beyond \$2,000,000 and for the years 1915-16, and following it has exceeded \$3,000,000. The total available income for 1903-04, the year immediately preceding this period, was \$956,472.80. The total sum available for 1919-20, including the balance at the beginning of the year, was \$3,967,848.20, an increase of \$3,011,375.40 over the income for 1903-04, or about 314 per cent.

GIFTS TO THE UNIVERSITY

The University has, at various times, been the recipient of important gifts. These have consisted of land, buildings, scientific collections, libraries, machinery, miscellaneous items, and sums of money. Usually any money received has been given for a definite purpose designated by the donor, such as a fellowship, a scholarship, a loan fund, a prize, or books of a special character.

The first gifts to the University were made in 1867 in order to secure its location in Champaign County. At that time the county, through a committee of its board of supervisors, offered the Urbana and Champaign Institute buildings and grounds, about 970 acres of farm land, one hundred thousand dollars in Champaign County ten per cent bonds, fifty thousand

TOTAL INCOME OF THE UNIVERSITY AND RELATED DEPARTMENTS—1904-20

Year (July 1- June 30)	From Federal Government	From State of Illinois	From Fees, Sales, Etc.	Total In- come for Year	Balance at Beginning of Year	Total Sum Available for Year
1904-05	\$ 73,000.26	\$ 526,200.00	\$ 259,497.49	\$ 858,697.75	\$ 217,975.79	\$ 1,076,673.54
1905-06	73,072.05	792,035.00	294,256.24	1,159,363.29	116,399.97	1,275,763.26
1906-07	84,409.62	622,500.00	300,099.38	1,007,009.00	232,161.47	1,239,170.47
1907-08	86,419.62	1,006,945.00	315,397.89	1,408,762.51	163,607.00	1,572,369.51
1908-09	93,480.80	1,265,845.00	334,673.11	1,693,998.91	300,640.92	1,994,639.83
1909-10	100,414.44	1,216,500.00	322,877.62	1,639,792.06	502,475.90	2,142,267.96
1910-11	107,467.68	1,097,000.00	355,572.60	1,560,040.28	441,997.95	2,002,038.23
1911-12	112,402.36	1,860,400.00	319,849.08	2,292,651.44	291,859.30	2,584,510.74
1912-13	112,016.53	1,568,900.00	289,156.91	1,970,073.44	606,194.24	2,576,267.68
1913-14	112,463.24	2,286,500.00	371,221.04	2,770,184.28	279,033.23	3,049,217.51
1914-15	122,462.04	2,286,500.00	399,390.29	2,808,352.33	85,992.08	2,894,344.41
1915-16	148,732.54	2,424,870.95	449,772.34	3,023,375.83	121,888.69	3,145,264.52
1916-17	170,634.69	2,575,129.05	494,624.36	3,240,388.10	228,770.59	3,469,158.69
1917-18	198,182.00	2,333,263.58	549,609.32	3,081,054.90	332,610.12	3,413,665.02
1918-19	229,159.14	2,303,933.77	776,256.19	3,312,349.10	310,267.71	3,622,616.81
1919-20 (Est.)	250,605.18	2,836,500.00	636,641.00	3,723,746.18	244,102.02	3,967,848.20
Total	\$2,074,922.19	\$27,003,022.35	\$6,468,894.86	\$35,549,839.40	\$4,475,976.98	\$40,025,816.38

dollars worth of freight donated by the Illinois Central Railroad Company, and two thousand dollars worth of trees and shrubs from the nursery of M. L. Dunlap of Savoy. The total value of these gifts has been variously estimated at from \$325,000 to \$450,000. The former figure is probably more nearly correct.¹¹

At the third meeting of the Board of Trustees of the University, held in November, 1867, the committee on the agricultural department reported as follows:

"The committee are of the opinion that upon proper application to the manufacturers of agricultural implements, one at least of each kind may be secured to the Institution free of charge. It will be manifestly to the interest of manufacturers to send their machines of different kinds here to be tested, as an indorsement by the officers of the Institution would be highly beneficial to the manufacturers, in making sales. The committee recommend the passage of the following resolution:

"Resolved, That Thomas Quick be instructed to correspond with the various manufacturers of agricultural implements, inviting them to donate to the University one at least of the various implements or machines, to be tested and used by the Institution, or placed in an exhibition hall, as the Board may elect, to form a permanent museum of agricultural implements."¹²

At the next meeting of the Board Mr. Quick reported that machinery valued at approximately \$400 had been promised the University by various donors and two-thirds of it had already been received.¹³ Several of the leading manufacturers had indicated also their willingness to furnish any of the more expensive implements manufactured by them to the University at half price.

Numerous donations of the same character have been made to the University during the subsequent years of its existence. Nor has the College of Agriculture been the only department

¹¹The value of the various tracts of land acquired by the University is given in detail in Chapter II.

¹²Rept., Univ. of Ill., 1868, p. 96

¹³Ibid, pp. 109-110

benefited in this manner. Several of the most important of the recent gifts of machinery to the University have been received by the College of Engineering. Among these may be mentioned a set of four axles and four pairs of supporting wheels valued at \$2,700 for the new Locomotive Testing Laboratory, given in 1912 by the Midvale Steel Company of Philadelphia;¹⁴ an automatic controller for electric motors, by the Electric Controller and Manufacturing Co. of Cleveland, Ohio;¹⁵ and a six-hundred horse power vertical triple-expansion engine for the Engineering Museum, donated in 1915 by the Commonwealth Edison Co. of Chicago.¹⁶

The R. T. Crane Company of Chicago presented to the department of mechanical engineering in 1916 a complete exhibit of sectional valves, steam taps, etc., the value of which was estimated at \$500. The Babcock and Wilcox Company of Bayonne, New Jersey, presented to the same department in 1916 a test drill for experimental purposes, of an estimated value of \$150.¹⁷

Books, singly and in the form of entire libraries, have been donated to the University at frequent intervals. Among the most important gifts of this character are the following: The Palmer Chemistry Library of about 360 volumes and 450 pamphlets, the library of the late Professor Arthur William Palmer of the University, was presented to the University in 1904 by Mrs. Anna Shattuck Palmer. The Karsten Collection, principally of French and German Philology and Literature, the library of the late Professor Gustaf E. Karsten of the University, was presented by Mrs. Eleanor G. Karsten in 1908. The B'nai B'rith Library of Jewish Literature was established in 1912 in consequence of a gift of \$500 for this purpose by District Number 6 of the Independent Order of B'nai B'rith, and is supported by a gift of fifty dollars annually from the same source. The D. C. Greene Collection, consisting of 219 volumes of books and newspapers relating to Japan, a part of the library of Rev. D. C. Greene, of Japan, was presented to

¹⁴Rept., Univ. of Ill., 1914, p. 146

¹⁵Rept., Univ. of Ill., 1914, p. 175

¹⁶Rept., Univ. of Ill., 1916, p. 879

¹⁷Ibid., p. 939



Natural History



Lincoln Hall

the University in 1915 by his son, Professor Evarts B. Greene. The Constance Barlow-Smith Collection, consisting of musical scores, manuscripts, books and portraits, was presented to the University by Mrs. Smith in 1916 upon her retirement from the assistant professorship of sight singing and ear training after thirteen years' teaching in the School of Music of the University. The Carl Martin James Collection, 1030 volumes relating to statistics and similar subjects, and the Amanda K. Casad Collection, 1732 volumes relating to history, economics, politics, and education, were presented to the University in 1915 and 1916, respectively, by President Edmund J. James. In 1919, Mr. Samuel Insull presented to the University a collection of U. S. Government reports, nearly complete.

The Quine Library of the College of Medicine had its beginning in a collection of books presented to the College in 1892 by Mrs. A. Reeves Jackson after the death of Doctor Jackson, the first president of the College of Physicians and Surgeons. Soon afterward Dr. William E. Quine gave a thousand volumes to the library and for a considerable period made an annual donation of \$300 for its maintenance.

An important series of gifts to the University is represented by twenty-seven tracts of land in various portions of the State, which have been donated for use as experiment fields. These have a total area of over 500 acres and a total estimated value of from \$75,000 to \$100,000.¹⁸

In February, 1917, the Trustees of the University were notified by the executors of the estate of the late Alfred B. Jenkins of West Orange, New Jersey, that the University of Illinois was one of twelve institutions named in Mr. Jenkins' will as residuary legatees of his estate. The principal of the gift when received is to be held as a part of the endowment fund of the University and to be known as the "Alfred B. Jenkins Endowment."¹⁹

The largest individual gift in the history of the University was received in 1914 when Captain Thomas J. Smith of Champaign, a former trustee, donated four farms having a total area

¹⁸Details regarding these fields are given in Chap. II

¹⁹Min., Bd. of Trustees, Univ. of Ill., 1916-18, p. 240

of about 770 acres and a total value of approximately \$215,000, to provide funds for the erection of a building for the School of Music as a memorial to his wife, Tina Weedon Smith.²⁰

Another noteworthy gift to the University was the presentation in 1913, by the Alumni of the College of Medicine and other friends of medical education, of the property of the College of Physicians and Surgeons of Chicago. This gift comprised the entire capital stock of the corporation, 2170 shares, having a par value of \$100 a share. The value of the real estate, library, apparatus, equipment and other personal property which had belonged to the corporation and which thus became the property of the University has been variously estimated at from \$300,000 to \$400,000.²¹ This was, however, subject to an indebtedness of \$245,000, which was not assumed by the University.²²

Still another very important gift was made in January, 1917, by Honorable William B. McKinley of Champaign, who offered to transfer to the University securities of the par value of \$120,000 to provide funds for the erection of an infirmary for students and faculty. The Board of Trustees accepted the gift and voted to give the name "McKinley Hospital" to the infirmary to be erected.²³ This was in addition to Mr. McKinley's gifts to the University Y. M. C. A. and Y. W. C. A., which were really for the use and benefit of students of the University of Illinois.

A considerable number of gifts have been made to the University in the form of materials for the museums and collections.

The first important gift of this character was made in 1874 as a result of the labors of the Regent, Dr. J. M. Gregory, in soliciting funds among the residents of Urbana and Champaign for the purpose of establishing an art collection. About \$2,000 was subscribed and the Art Museum established in University Hall during the same year.

²⁰Further details regarding this gift will be found in Chapter II

²¹Cf. Rept., Univ. of Ill., 1912, pp. 469-470; 1914, p. 189

²²For a full statement of this transfer see Chapter IX

²³Min., Bd. of Trustees, Univ. of Ill., 1916-18, p. 194

A bust of Professor Edward Snyder in marble, the work of Mr. Lorado Taft of the class of 1879, was presented to the University by Mr. Taft in 1915.

A considerable part of the paleontology collection is made up of specimens donated to the University. In 1876 Mr. Emory Cobb, a trustee, purchased and presented to the University the full series of casts of fossils made by Professor H. A. Ward of Rochester, N. Y. This collection, valued at \$2,500, represented the rarest and most valuable fossils of the British Museum, and of other great European collections, as well as those of the leading collections in America. The private collection of fossils made by Mr. Tyler McWhorter and valued at approximately \$1,000 was presented to the University by Mr. McWhorter in 1888. In 1913 a collection of marine and fresh water shells comprising about 3,000 specimens collected by the late A. H. Worthen was given to the University by Mrs. Thomas A. Worthen.

Many objects from the finds of the Egypt Exploration fund have been donated to the Museum of Classical Archeology and Art by Mr. W. G. Hibbard, Jr., of Chicago, at various intervals since 1911. These include about 117 pieces of pottery and terra cottas and about 195 other objects of stone, metal, wood, bone and leather. Professor W. N. Stearns of Fargo College, North Dakota, has also donated to this museum about twenty-eight pieces of pottery and fragmentary inscribed ostraka from Egypt.

Mr. Hibbard was the donor also, in 1916, of a collection of 300 valuable coins of various countries. Of these, forty, of ancient Greek and Roman coinage, have been placed in the Classical Museum, and the others in the Museum of European Culture.

A collection of birds' eggs was given to the University in 1913 by Messrs. M. K. and M. H. Barnum. A large part of this material was collected in the Southwestern States years ago before the inroads of civilization had altered the country and its native fauna. Species to the number of 248 are represented by 1,483 specimens.

An excellent collection of corals was presented to the University in 1915 by the Peabody Academy of Science of Salem,

Massachusetts. The collection comprises 23 specimens of 22 species, from Florida, the Hawaiian Islands, East India and Africa.

The entomology collections of the University were enlarged in 1897 by the acquisition of the Bolter collection, which was donated to the University by the executors of the estate of the late Andreas Bolter of Chicago. About 120,000 specimens are included, representing over 16,000 species, chiefly from North America.

In 1912 the department of botany was the recipient of a gift of the personal herbarium of Mrs. Agnes Chase of Washington, D. C. This collection represents chiefly the flora of Illinois, but also that of the Eastern and Southeastern states. There are about 10,000 specimens in the collection, which has a value of from \$1,500 to \$2,000.

Another recent gift to the same department was a set of the *Phycotheca Boreali-Americana*, donated by Mrs. Mary S. Snyder in 1914. This collection includes about nine-tenths of all the marine algae found on the coasts of the United States. Over 2,000 species are represented.

In 1916, the Herbarium was greatly enriched by the Stevens Collection of Porto Rican Fungi, 14,000 numbers presented by Professor F. L. Stevens.

In 1915 a valuable collection consisting of 226 microscope slides was presented to the University by R. Halsted Ward, M. D., of Troy, New York. The slides represent a great variety of objects in the fields of botany, mineralogy, zoology, embryology and histology, prepared by experts of this country and abroad.

A large collection of the materials of commerce was presented to the University in 1905 by the Philadelphia Commercial Museum. The collection includes minerals, dyes, drugs, grasses, roots, woods, nuts, seeds, etc. Several private manufacturing and mercantile establishments have contributed materials of the same general character.

Of the various gifts to the University several of the most important have been for the purpose of establishing funds from which loans might be made to worthy students.

A fund of \$100 was established by the class of 1895, only \$50 of which was to be lent in any one year. The benefit of this fund is open only to students who at the time of their application are members of the freshman class.

The Edward Snyder Loan Fund was established in 1899 by the gift of \$12,000 to the University by Edward Snyder, formerly professor of the German Language and Literature. Juniors, seniors and graduate students are eligible to share in the benefits of this fund.

A fund of \$75 for the benefit of graduate students was established in 1907-08 by the members of the Graduate Club of the University.

In 1911 the sum of \$409.44 was given by the Woman's League of the University of Illinois as a trust fund to be known as the Woman's League Loan Fund, to be available to any woman properly matriculated in the University, on certain conditions stipulated in the deed of gift.

In 1912 Honorable William B. McKinley of Champaign, Illinois, established a loan fund for undergraduate men by transferring to the University notes aggregating about \$12,000 which represented personal loans made by himself to students in previous years. It was stipulated that a preference should be shown to upper classmen in making loans from this fund.

In 1912 Mr. Henry Strong of Chicago provided in his will for the establishment of an educational fund for the help of self-supporting students of ability and enterprise. An allotment of this fund to certain state universities is made annually by the trustees of the fund. Since 1912-13 the University of Illinois has received an allotment each year, amounting to \$500 for each of the first four years and \$250 for the year 1916-17. These sums are lent to students in accordance with certain regulations approved by the trustees of the fund.

In December, 1914, the sum of \$5,000 was donated as the nucleus of a loan fund for students of high character, intellectual capacity and physical vigor, who have completed not less than two full years of work in the University. The loans from this fund, which is known as the Margaret Lange James Student Loan Fund, are made preferably to women students. Subsequent donations—among them a gift of \$500 by Mr.

Homer A. Stillwell of Chicago—have increased the fund to about \$5,630.

A loan fund for the benefit of women students in the School of Pharmacy was established in May, 1917, by the Women's Organization of the Chicago Retail Druggists Association. The initial sum constituting the principal of the fund was \$115.²⁴

Several donations to the University have been in the form either of annual prizes offered to the student body or of a sum of money, the income from which was to be offered each year as a prize.

Captain W. C. Hazelton provided a medal in 1890 which is awarded annually, at a competitive drill held in May, to the best drilled student. The winner may wear the medal until the fifteenth day of the following May, when he must return it for the next competition.

In 1898 Mr. William Jennings Bryan gave to the University the sum of \$250, from the interest on which a prize of \$25 is offered biennially for the best essay on the science of government.

The Champaign and Urbana lodge of the Independent Order of B'nai B'rith has donated to the University the sum of \$50 annually since 1912 to be awarded in prizes to students in the University for essays on Jewish subjects.

Since 1913 the American Law Book Company of New York and Callaghan and Company of Chicago have each offered an annual prize of certain of their publications to students making the highest averages in the senior and second year classes respectively in the College of Law.

The local chapter of Phi Beta Kappa offers annually a prize of \$25 to that member of the chapter who at his graduation from the College of Liberal Arts and Sciences gives evidence of the greatest promise as a scholar in the domain of liberal arts.

In 1913 Mr. Joseph C. Llewellyn of Chicago, a graduate of the University of the class of 1877, established for a period of four years a prize of \$50 per annum for a problem in design, the competition being limited to students in architectural engineering.

²⁴Min., Bd. of Trustees, Univ. of Ill., 1916-18, p. 297

For two years, 1912-13 and 1913-14, the Northwestern Terra Cotta Company of Chicago offered a prize of \$50 to be awarded in a competition in architectural design involving the decorative use of terra cotta.

Beginning with the class of 1915, the American Institute of Architects has offered a medal annually to the senior in the department of architecture whose development during the four years' course is the most consistent and best.

The Scarab Society of the department of architecture has offered a bronze medal annually since 1915 to be awarded during the second semester to a student in architecture for the best solution of a problem in architectural design.

The sum of \$50 was received by the University in 1916 as a gift from Division One of the Ancient Order of Hibernians, to be awarded as a prize for the best essay written by an undergraduate or graduate student in the University on a subject connected with ancient Irish literature, history or archeology. It is hoped by the donors that a fund of \$1000 may be established, from the interest of which the prize may be made permanent.

At various times sums of money have been donated to the University for the purpose of establishing annual scholarships.

In 1902 Professor R. L. Rea of the College of Medicine bequeathed \$5,000 to the College for the establishment of four scholarships for the aid of needy students. The net amount received by the College after the payment of the inheritance tax and other fees was \$4,800. This sum has been invested in mortgage bonds, the income from which is received by four students annually.

The Northwestern Branch of the Woman's Foreign Missionary Society of the Methodist Episcopal Church paid over to the College of Medicine in 1902 the sum of \$2,000 for the establishment of two scholarships. In return the college agreed to allow the Society to appoint one student to each scholarship so long as the College continued to provide complete education for women. In case this condition should at any time cease to be maintained, the sum given was to be returned to the Society. Students appointed to these scholarships are exempt from the payment of tuition and similar fees.

In 1910 Mr. Francis J. Plym of Niles, Michigan, a graduate of the University of Illinois of the class of 1897, offered to the University the sum of \$1,000 a year for the period of five years for the establishment of a fellowship for the advanced study of architecture. The holder of the annual fellowship established in consequence of this gift is expected to spend the year in study and travel abroad. Although the proposed term of five years expired in 1914, Mr. Plym has continued to contribute \$1,000 annually for the maintenance of the fellowship. From the accumulated interest on two annual contributions which could not be used immediately because of the European war, three prizes amounting to a total of \$50 were offered in 1916-17, in accordance with the desire of Mr. Plym, for the best solutions to a problem in architectural design which might be presented by members of the junior class in architectural engineering.

The gift of certain farm lands by Captain Thomas J. Smith of Champaign, already referred to, to provide funds from which a building might be erected for the School of Music, was accompanied by a request that four free scholarships in the School of Music should be granted annually to young women who might seek a musical education but who might be unable to pay the customary charges for instruction in music. Accordingly, four such scholarships were established by the Board of Trustees and became available first in the fall of the year 1916.

The Board of Trustees of the University were notified in June, 1916, that the Irish Fellowship Foundation of Chicago would guarantee a fund of \$1200 for Gaelic research work in the University of Illinois for the year 1916-17. In consequence of this gift a Fellowship in Gaelic was established and an appointment made for that year.

In 1919, Mr. Robert F. Carr, President of the Board of Trustees, gave the University securities worth \$10,000 to endow the Robert F. Carr Fellowship in Chemistry.

For the years 1918-19 and 1919-20, the E. I. Du Pont de Nemours Company have given an annual stipendium of \$750 for the Du Pont Fellowship in Chemistry.

CHAPTER II

LAND

I. IN 1867

Early in the legislative session of 1867 the General Assembly of Illinois passed an act in relation to the location of the Illinois Industrial University, a part of which act was as follows:

“WHEREAS, Each portion of the state is alike interested in the proper location of said University, and it is desirable to enable the public spirit of each community or section to fully compete for such location; therefore

“Section 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly, That any county, city, township, or incorporated town of said state, may, by taxation, as well as by voluntary subscription of its citizens, raise a fund to secure the location of said University at any point whatever; and any other corporation in this state may make bids and subscriptions for the purpose of securing said location at any point whatever.¹

This act was approved January 25, 1867. Within a month the contest for the location of the University, which had narrowed to four counties,—Champaign, Logan, McLean and Morgan—was decided in favor of Champaign county; and on the 28th of February an act was approved authorizing the appointment of a board of trustees and the permanent location of the University in that county so soon as the terms of the offer made to the state should be fulfilled.

Section 12 of this act was as follows:

“It shall be the duty of the board of trustees to permanently locate said University at Urbana in Champaign County, Illinois, whenever the county of Champaign shall, according to the proper forms of law, convey or cause to be conveyed to said trustees, in fee simple, and free from all incumbrances, the Urbana and Champaign Institute buildings, grounds, and

¹Laws of Illinois, 1867, p. 122

lands, together with the appurtenances thereto belonging, as set forth in the following offer in behalf of said county, to-wit:

“The undersigned, a committee appointed by the board of supervisors of Champaign County, are instructed to make the following offer to the State of Illinois, in consideration of the permanent location of the Illinois Industrial University at Urbana, Champaign County, viz: We offer the Urbana and Champaign Institute buildings and grounds, containing about ten acres; also one hundred and sixty acres of land adjacent thereto; also, four hundred acres of land, it being part of section No. twenty-one, in township No. nineteen, north, range No. nine east, distant not exceeding one mile from the corporate limits of the city of Urbana.

“Also, four hundred and ten (410) acres of land, it being part of section No. nineteen, township No. nineteen north, range No. nine east, within one mile of the buildings herein offered.

“Also, the donation offered by the Illinois Central Railroad Company of fifty thousand dollars’ worth of freight over said road for the benefit of said University.

“Also, one hundred thousand dollars in Champaign county bonds, due and payable in ten years, and bearing interest at the rate of ten per cent, per annum, and two thousand dollars in fruit, shade, and ornamental trees and shrubbery, to be selected from the nursery of M. L. Dunlap, and furnished at the lowest catalogue rates, making an estimated valuation of four hundred and fifty thousand dollars (\$450,000). Titles to be perfect, and conveyances to the state to be made or caused to be made by the county of Champaign, upon the permanent location of the Illinois Industrial University upon the said grounds, so to be conveyed as aforesaid, and we hereby in our official capacity guarantee the payment of the said bonds and the faithful execution of the deeds of conveyance, free from all incumbrances, as herein set forth.

W. D. SOMERS,

T. A. COSGROVE,

C. R. MOORHOUSE,

Committee.”²

²Session Laws of Ill., 1867, p. 123

It will be noticed that the land donated by Champaign County consisted of four separate tracts, amounting in all to about 980 acres. One of the first acts³ of the Board of Trustees was to purchase additional land adjoining that given by the county, thereby enlarging the campus, straightening the boundary lines, and joining the 160 acre tract to the plot on which the chief building of the University stood. By the end of the year 1867 the majority of the various purchases called for by this plan had been consummated. The "Urbana and Champaign Institute grounds containing about ten acres," specified in the offer of the county to the legislature, were found to contain somewhat less than seven and a half acres. At a meeting of the executive committee of the Trustees of the University held June 14, 1867, it was "Resolved, That it is the opinion of this committee that Champaign county should make good its offer to the State by conveying sufficient grounds contiguous to the University to make up the size of the ground to ten acres."⁴ On the same day a committee from the Board of Supervisors of the county reported to the executive committee of the Trustees that the Supervisors had authorized the conveyance to the University of ten lots adjacent to the campus and owned by the county.⁵

The program of campus enlargement included also the purchase of a tier of lots to the west of the Institute grounds, and the moving of Wright Street about sixty-six feet westward. The land formerly occupied by Wright Street thus became part of the campus.⁶ The west fourteen feet of this land, however, was added to Wright Street, giving that street a width of eighty feet.

In all, during the year 1867, twenty-two lots were purchased, as well as nearly all of a forty-acre tract of land⁷ forty rods in width from east to west extending one hundred sixty rods southward from Springfield Avenue to the 160 acre

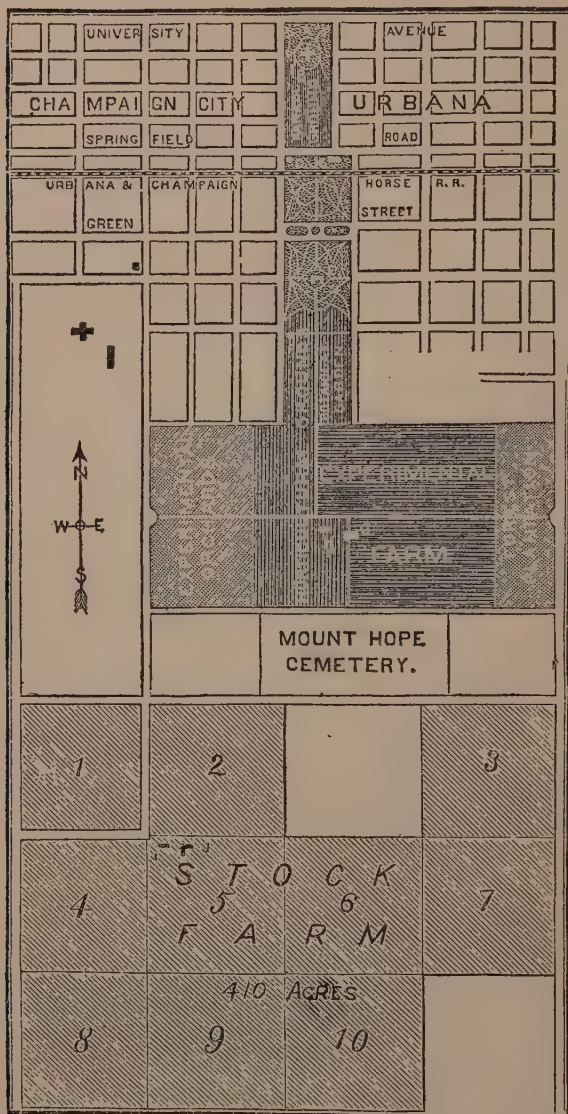
³Rept. Univ. of Ill., 1868, p. 42

⁴Rept. Univ. of Ill., 1868, p. 136

⁵Rept. Univ. of Ill., 1868, p. 139

⁶Rept. Univ. of Ill., 1868, p. 98; also Controller's Rept., Univ. of Ill., Sept. 2, 1913, pp. 86-7

⁷Rept. Univ. of Ill., 1868, pp. 140-2



THE CAMPUS IN 1870

tract already owned by the University. Among the lots purchased at this time were those lying between the Institute grounds and Springfield Avenue.⁸ So much of White and Stoughton Streets as crossed this portion of the campus was vacated by the city of Urbana, as also were the alleys running thru blocks 52 and 53, in accordance with a special Act of the General Assembly.⁹ The city of Urbana was permitted however, to extend Green Street across the campus.¹⁰ By the end of the year 1867, therefore, the University property extended continuously—except as it was crossed by Springfield Avenue, and by Green Street—from University Avenue to the south line of the 160 acre farm.¹¹ South of this farm was the Mount Hope Cemetery, and beyond the cemetery was the so-called South Farm of the University, comprising 410 acres. The 400 acre tract, known as the Griggs farm, was a mile east of the South Farm. The total amount of land possessed by the University at this time amounted to about 1017.97 acres,¹² and was valued at approximately \$123,270.

The accompanying map of the University grounds, reprinted from the University Trustees' Report for 1870-71,¹³ p. 17, shows the grounds practically as they were at the end of the first year of the University's existence—only three additional lots having been purchased between the years 1867 and 1871. The Griggs farm of 400 acres does not appear upon the map.

The detailed legal description of the lands acquired by the University at various times will be found at the end of this chapter. The following is a summary of the lands acquired during the year 1867. The figures in the column headed "Item" refer to the legal description of the property at the end of the chapter.

⁸Rept. Univ. of Ill., 1868, pp. 117-19

⁹Rept. Univ. of Ill., 1868, p. 138; Private Laws of Ill., 1869, Vol. II, p. 300

¹⁰Rept. Univ. of Ill., 1868, pp. 138-42

¹¹Comptroller's Rept., Univ. of Ill., Sept. 22, 1913, pp. 86-7

¹²Cf. Rept., Univ. of Ill., 1870-71, pp. 16-18

¹³Ibid

LANDS ACQUIRED IN 1867

City Property in Urbana and Champaign		
Item	Acres	Cost ¹
1	7.4	\$40,000
8	5.2	5,100
9	.2	300
10	.2	300
11	.2	150
12	.2	560
13	.2	300
14	.4	500
15	36.6	7,500
16	.2	750
17	.4	600
Total	51.2	\$56,060

Farm Land ² at Urbana and Champaign		
Item	Acres	Cost ¹
2	53.65	\$ 5,300
3	21	2,210
4	7	1,000
5	80	6,000
6	405.12	28,700
7	400	24,000
Total	966.77	\$67,210

SUMMARY

	Acres	Cost ¹
City Property Acquired in 1867	51.2	\$ 56,060
Farm Property " " "	966.77	67,210
Total Property " " "	1017.97	\$123,270

II. From 1868 to 1904

During the thirty-seven years from 1868 to 1904 no large additions were made to the campus proper, and no additions were made to the acreage of the farm lands.

The most important acquisition was that of nearly the entire tier of lots, 198 feet deep (from east to west), lying east of that portion of the campus which extended from Springfield Avenue to the north line of the "160 acre farm." Mathews Avenue was opened as far south as this line and thus became

¹Estimated value if donated

²Of the farm land, items numbered 3, 4 and 5 are now within the corporate limits of the city of Urbana, and the north 80 rods of item 2, embracing 40 acres, are within the limits of the City of Champaign.

the eastern border of the campus for approximately 160 rods. These lots amounted in all to about 11 acres. Of these, $4\frac{1}{2}$ acres were purchased in 1886, $6\frac{1}{3}$ acres in 1894, and about a fourth of an acre in 1903.¹⁴

About 20 lots near the right of way of the railroad company, which had not been secured when the 40 acre tract was purchased in 1867, were acquired at intervals during the years from 1869 to 1904. These amounted to about four acres.¹⁵

The sale of the Griggs farm of 400 acres was considered by the Trustees of the University as early as 1867. At a meeting of the executive committee held June 14 of that year a motion was carried providing that a committee be instructed "to obtain offers for the Griggs farm, or some part thereof, and report at the next meeting of the executive committee."¹⁶ The proposition to sell the farm was voted down on two occasions by the Board as a whole—November 27, 1867, and March 11, 1868¹⁷—but in 1872 eighty acres of the farm were sold;¹⁸ in 1878, one hundred and sixty acres;¹⁹ and the remaining one hundred and sixty acres were sold in 1896.²⁰

In 1896 the transfer of the Chicago College of Pharmacy to the University resulted in the acquisition by the University of three parcels of land in Chicago, having an aggregate area of between two and three acres.²⁰

By 1904, therefore, the domain of the University comprised about 635 acres. The general outline of the campus had changed very little from its form in 1867, the most noticeable change being the increase of 198 feet in the width of the main campus as already described. But the sale of the "Griggs farm" had reduced the farm lands belonging to the University by 400 acres.

¹⁴Comptroller's Rept., Univ. of Ill., Sept. 22, 1913, pp. 87-88

¹⁵Ibid

¹⁶Rept., Univ. of Ill., 1868, p. 141

¹⁷Ibid, pp. 102, 133

¹⁸Rept., Univ. of Ill., 1872-3, p. 136

¹⁹From Records of Champaign County

²⁰Rept. Univ. of Ill., 1896, p. 241; Comptroller's Report, Univ. of Ill., September 22, 1913, p. 92

LAND ACQUIRED FROM 1868 TO 1904

City Property in Urbana and Champaign		
Item	Acres	Cost ¹
18	.4	\$ 400
19	.2	200
20	.2	150
21	.89	450
22	.2	150
23	2.2	830
24	6.3	4,500
25	.38	3,700
26	.3	4,800
27	1.1	7,000
28	.27	5,500
29	.81	
Total	13.28	\$27,680

City Property in Chicago		
Item	Acres	Cost ¹
30	2.64	\$2,300

SUMMARY

	Acres	Cost ¹
City property acquired in 1867	51.2	\$ 56,060
“ “ “ “ 1868-1904	15.92	29,980
Farm property acquired in 1867	966.77	67,210
“ “ “ “ 1868-1904	.....	.....
Total	1,033.89	\$153,250
Less Sales	400.2	24,200
Net Total—1904	633.69	\$129,050

¹Estimated value, if donated²Comptroller's Report, U. of Ill., 1913, p. 88

III. FROM 1904 TO 1920

During the sixteen years from 1904 to 1920 substantial additions were made both to the campus proper and to the farm lands occupied by the University.

In 1905 two lots on the west side of Mathews Avenue and north of Green Street were purchased.²¹ Three lots at the



Agronomy Greenhouse



Agronomy Barn and Implement House



Stock Pavilion



Cattle Barns



Farm Mechanics

southwest corner of Mathews and Springfield Avenues were purchased in 1916. These two purchases completed the ownership by the University of the entire block of land bounded by Mathews, Springfield and Burrill Avenues and Green Street.²²

In 1911 and 1912 eight lots east of Mathews Avenue were purchased,²¹ comprising a tract of land extending from Mathews Avenue thru to Goodwin Avenue and from the street railway south to the creek. Nearly three acres were included in this purchase. In 1913-14 thirteen lots lying east of the last mentioned tract were purchased, comprising about three acres.²¹ Three additional lots adjacent to these thirteen were purchased in 1915.²³ The land embraced in these two tracts was acquired for the use of various departments of the College of Engineering.

During the year 1913-14 the University purchased also six lots in the block bounded by Mathews, Stoughton, Goodwin and Springfield Avenues.²⁴ Upon this land a building for the School of Education has been erected.

During the same year a tract of ten acres within the limits of the City of Champaign, extending from First Street to the Illinois Central Railroad, was purchased and assigned to the Department of Botany.²⁵ Two lots also were purchased in 1914 at the southeast corner of Springfield and Mathews Avenues as a site for the botany greenhouses.²⁶ Another block in Champaign, adjoining the campus and bounded by Wright, Healy and Sixth Streets and the interurban right of way, was purchased in 1914 as a site for a laboratory, a pond and an insectary for the Department of Zoology.²⁷ The Vivarium has already been erected upon this tract. In 1914-15 three lots on Nevada Street in Urbana were purchased as a site for a Women's Residence Hall.²⁶

²²Min. of Bd. of Trustees, U. of Ill., 1916-18, pp. 124, 136

²³Rept., U. of Ill., 1916, p. 768

²⁴Comptroller's Report, 1914, pp. 51-52

²⁵Comptroller's Report, Univ. of Ill., 1914, pp. 51-52

²⁶Comptroller's Report, Univ. of Ill., 1915, p. 76

²⁷Rept., Univ. of Ill., 1914, p. 753

In 1917, three lots having a total frontage of 180 feet on Nevada Street between Goodwin and Mathews Avenues, Urbana, were purchased, and a residence upon one of these lots was assigned temporarily as the President's House, the former official residence of the President having been given over to other uses. It is the intention to use these lots in the future as a site for another residence hall for women students.²⁸

A lot on Sixth Street, Champaign, directly west of the Administration Building was purchased in 1917 to serve as a site for a University Press building which should house the courses in Journalism, the print shop, the office of the University publications, and the University Press.²⁹

In 1907 a farm of 40 acres was purchased and another of 40 acres in 1911.³⁰ These two purchases gave the University possession of all of section 19 except the south half of the two south quarters. In 1913-14 five tracts of farm land were purchased, containing respectively 13, 160, 40, 80 and 40 acres—a total of 333 acres.³⁰ The 13 acre tract lies east of the cemetery and therefore unites the so-called South Farm with the 160 acre tract given the University in 1867. The other four purchases constitute the west half of Section 20 and therefore are east of and contiguous to the South Farm.

Between September, 1917, and April, 1918, the University purchased as a site for the new McKinley student hospital a group of six lots which include the entire frontage on Armory Avenue between Third and Arbor Streets to a depth of 174 feet. Also a lot on Stoughton Street was added to the Education Building site, and two pieces of tenant property on Harvey Street were purchased.³¹

In 1915 three tracts of farm land comprising a total of thirty-two and a half acres lying south of the City of Champaign, west of Fourth Street, were purchased by the University.³² The University purchased in 1916 a farm of 84 acres directly west of the original "South Farm."³³

²⁸Min., Bd. of Trustees, U. of Ill., 1916-18, pp. 239, 252, 340, 345

²⁹Min., Bd. of Trustees, U. of Ill., 1916-18, pp. 333, 512

³⁰Comptroller's Report, U. of Ill., 1914, pp. 51-52

³¹Comptroller's Report, U. of Ill., 1918, pp. 91-92

³²Rept., Univ. of Ill., 1916, p. 779

³³Min. of Bd. of Trustees, U. of Ill., 1916-18, pp. 137, 180

In the summer of 1917 forty acres of woodland three and a half miles northeast of Urbana were purchased by the University, to serve as a natural history preserve for the especial use of the departments of botany, entomology and zoology.³⁴ In 1919, 20 acres immediately north of this tract were purchased and added to it.

The total cost of the 48 city lots in Urbana and the two undivided blocks in Champaign purchased during the sixteen years, amounting in all to about 23.17 acres, was \$227,722.33. The cost of the 569.35 acres of farm land amounted to a total of \$404,555.46.

In 1913, alumni of the Medical School of the University, together with other friends of medical education, secured and donated to the University the entire stock of the College of Physicians and Surgeons of Chicago. The acceptance of this stock brought to the University the property of that College, including the land occupied, amounting to a total of about 1.3 acres.³⁵ The value of this land was estimated at \$60,000 by a committee of the Chicago Real Estate Board in June, 1913.³⁶

In 1914-15 the so-called "acre property" in Chicago, a part of the land acquired with the School of Pharmacy in 1896, was sold. This tract contained about two and a half acres.³⁷

In 1915 three adjoining pieces of property in Chicago in the vicinity of the Colleges of Medicine and Dentistry of the University of Illinois, were purchased as a site for the School of Pharmacy.³⁸

In 1917 four lots near those of the School of Pharmacy were purchased as an addition to the Chicago campus.³⁹

In addition to the lands occupied by the University at Urbana and in its vicinity, a large number of tracts of farm land in various parts of the state are used by the Agricultural

³⁴Ibid. pp. 95, 333, 412

³⁵Rept., Univ. of Ill., 1914, pp. 172-4, 204

³⁶Rept., Univ. of Ill., 1914, p. 257

³⁷Rept., Univ. of Ill., 1916, p. 190

³⁸Ibid, p. 861

³⁹Comptroller's Report, Univ. of Ill., 1918, p. 92-93, Tract No. 105, 106 Min., Bd. of Trustees, Univ. of Ill., 1916-18, p. 240

Experiment Station of the University as experiment fields. The General Assembly of 1901 appropriated \$20,000 for soil investigation. This amount has been increased by subsequent legislatures. Fifty thousand dollars was appropriated in 1903, in 1905, and in 1907; \$120,000 in 1909 and \$130,000 in 1911. Several experiment fields were established in 1901, and within six years twenty fields were occupied. At first such tracts of land were rented for a term of years; but since 1905 many fields have come into the possession of the University by gift or by purchase, chiefly by the former method.

At the present time thirty fields are owned by the University. Two of these, comprising a total of 105.33 acres, have been purchased. The cost of the two fields was \$6,675, an average of \$63.37 per acre. Twenty-eight fields with a total area of 608.39 acres have been donated to the University. The approximate value of this land is \$87,772, or about \$145 an acre.

During the past sixteen years, therefore, the University has acquired for experiment fields, outside of its holdings at Urbana, thirty tracts of land containing 713.72 acres and a total value of \$94,447.⁴⁰

Twenty leased fields are still occupied also, having a combined area of 349.95 acres. The sum paid as rental for these tracts amounts to \$2,683.10 a year. The list of the leased fields is as follows:⁴¹

LOCATION	ACRES	ANNUAL RENTAL
Anna	2	\$20.00
Antioch	1.7	8.50
Bloomington	4.4	60.00
Carlinville	20	00.00
Centralia	16	*

LOCATION	ACRES	ANNUAL RENTAL
Champaign	80	\$1,000.00
Cutler	18.5	117.60
De Kalb	36.25	290.00
Dubois	5	25.00
Fairfield	20	100.00

⁴⁰Comptroller's Report, Univ. of Ill., 1913, pp. 89ff, 1914, pp. 52-53; Corrected 1920

⁴¹Rept., Univ. of Ill., 1914, p. 742 (list corrected 1920)

*On a half-crop basis



AGRICULTURAL EXPERIMENT FIELDS, 1920

Fairfield	20	100.00
Flora	15	60.00
Galesburg	25	200.00
Louisville	15	75.00
McNabb	6	36.00
Odin	20	100.00
Rockford	10	120.00
Union Grove	20	200.00
Urbana	4	60.00
Virginia	11.1	111.00
TOTAL	349.95	\$2,683.10

Various crops are grown on each of the soil experiment fields, and in several cases for the special purpose of crop experiments. Some of the experiment fields are operated primarily for crop investigation. Six others are under the direction of the Department of Horticulture. One field, in addition to those already mentioned, is operated by the department of Horticulture under a cooperative agreement. This is an orchard at Neoga, containing 40 acres, which has been under the direction of the department since 1911.

On June 8, 1914, Captain Thomas J. Smith of Champaign, a former trustee of the University, announced to the Board of Trustees his intention to donate four farms containing an aggregate of 768.19 acres and valued at approximately \$215,000 to the University for the purpose of providing funds for the erection of a building for the School of Music as a memorial to his wife. In the course of the next three months the transfer of this property to the University was completed. The trustees assigned a site immediately east of the Auditorium for the building, which is known as the Tina Weedon Smith Memorial Building, plans were prepared for the structure, and work was commenced in the fall of 1916 and completed in 1920. This gift represents the largest single donation thus far made by an individual to the University.⁴² One of the four farms, containing 214 acres, was sold in August, 1917. The other three farms have since been sold.⁴³

⁴²Rept., Univ. of Ill., 1914, p. 755; 1916, pp. 120-123, 137-141

⁴³Min. of Bd. of Trustees, Univ. of Ill., 1916-18, pp. 123, 136, 512; 1918-20, pp. 86, 214, 292, 294, 408.

LAND ACQUIRED BY THE UNIVERSITY, 1904-20

City Property in Urbana and Champaign		
Item	Acres	Cost ¹
31	1.1	\$15,000.00
34	.3	2,500.00
35	.19	5,600.00
36	.5	1,800.00
37	.2	4,350.00
38	.4	4,450.00
39	.27	6,450.00
40	.78	10,800.00
41	.4	5,000.00
42	.4	11,000.00
43	.2	3,500.00
44	.2	2,600.00
45	.15	3,000.00
46	.85	4,450.00
47	.12	1,500.00
48	.2	3,500.00
49	.2	1,450.00
50	.2	1,800.00
51	.15	5,000.00
52	.15	6,800.00
53	.15	4,800.00
54	.15	2,500.00
55	.15	2,850.00
56	.15	2,600.00
57	1.16	14,000.00
63	10	7,705.81
64	.4	10,000.00
65	.22	3,601.59
66	.22	3,601.59
67	.22	3,601.60
68	.6	10,116.88
70	.6	12,000.00
72	.12	1,400.00
73	.24	16,500.00
74	.24	3,869.00
76	.34	6,500.00
77	.28	3,639.14
78	.31	6,005.38
79	.31	6,231.34
80	.15	3,250.00
81	.2	2,400.00
Total	23.17	\$227,722.33

Farm Land at Urbana and Champaign		
Item	Acres	Cost ¹
32	40	\$12,000.00
33	40	20,000.00
58	13	20,481.33
59	160	160,000.00
60	40	24,000.00
61	80	48,000.00
62	40	24,074.13
69	32.35	50,000.00
71	84	34,000.00
75	40	12,000.00
75a	20	6,000.00
Total	589.35	\$410,555.46

City Property in Chicago		
Item	Acres	Cost ¹
82	1.16	\$60,000.00
83	.21	16,100.00
84	.14	9,000.00
85	.21	10,000.00
86	.17	16,676.67
87	.13	14,248.33
87a	.07	1,337.50
87b	.07	1,800.00
Total	2.16	\$129,162.50

¹Estimated value, if donated

Experiment Fields Thruout Illinois		
Item	Acres	Cost ¹
88	16	\$ 320
89	15	750
90	20	1,000
91	86	4,875
92	15	3,000
93	20	4,000
94	20	6,500
95	20	3,500
96	20	4,000
97	19.33	1,800
98	21.41	4,282
99	20	4,000
100	20	3,000
101	25	1,800
102	20	1,500
103	30	1,800
104	29.31	3,000
105	20	4,500
106	20	1,500
107	24	1,920
108	20	6,500
109	17	1,600
110	20	500
111	17.09	4,000
112	31	8,000
113	20	5,000
114	20	3,000
115	32.58	1,300
116	40	6,000
116a	15	1,500
Total	713.72	\$94,447

Lands donated by Captain Thomas J. Smith to provide funds for Music Building		
Item	Acres	Estimated Value
117	240	\$54,000
118	214	53,000
119	234.19	72,000
120	80	36,000
Total	768.19	\$215,000

¹Estimated value, if donated

SUMMARY OF LAND ACQUIRED BY THE UNIVERSITY DURING THE
PAST FIFTY YEARS:

(1) About 981 acres valued at \$110,710 were donated to the University by Champaign County to secure its location in that county in 1867. During the year 1867 the Board of Trustees purchased sufficient land to bring the total up to about 1017.97 acres. For this purpose \$16,060 was expended. The total value of the land owned by the University by the end of the year 1867 was therefore approximately \$123,270.

(2) During the thirty-seven years from 1868 to 1904 the University acquired about 16 acres of city property, of which it sold .2 acres, as well as 400 acres of farm land. Its domain, therefore, comprised about 633.19 acres in 1904. Twenty-nine thousand, nine hundred and eighty dollars had been expended for land, and land originally valued at \$24,200 had been sold. The net increase in the value of the University holdings on the basis of their original cost was, therefore, \$5,780; and the total value of the University lands in 1904 on this basis was \$129,050.

(3) During the sixteen years from 1904 to 1920, the University bought 23.17 acres of city property in Urbana and Champaign at a total cost of \$227,722.33, and 589.35 acres of farm land in the vicinity of the two cities at a cost of \$410,555.46—a total of 592.52 acres at a cost of \$638,277.79. In addition, thirty experiment fields located in various sections of the state were acquired by gift or by purchase, containing a total area of 713.72 acres, and having a combined value of \$94,447. Two and a half acres of city property in Chicago, originally valued at about \$1,900, were sold; but other property in that city, amounting to 2.02 acres and having a value of approximately \$129,162.50 was acquired. In 1914 four farms having a total area of about 768.19 acres and valued at approximately \$215,000 were donated to the University, from the sale of which funds should be provided for a building for the School of Music.

The total net area added to the domain of the University during this period (excluding the T. J. Smith land to be sold) was 1,328.26 acres—an increase of 217 per cent over the num-

ber of acres owned by the University in 1904. The value of the land so added was \$861,887.29, or nearly six and a half times the original cost of all the land owned by the University in 1904. On June 30, 1920, the University possessed land amounting to 1,959.45 acres and having a value, on the basis of its original cost, of \$987,437.29. The actual value at that date was, of course, much greater.

SUMMARY OF PROPERTY

1867-1920		
1867	Acres	Cost
City property		
Urbana-Champaign	51.2	\$ 56,060
Farm property	966.77	67,210
Total	1017.97	\$ 123,270
1868-1904		
City property		
Urbana-Champaign	13.28	\$ 27,680
Chicago	2.64	2,300
Farm property . . . . .	.....	.....
Total	15.92	\$ 29,980
1904-1920		
City property		
Urbana-Champaign	23.17	\$ 227,722.33
Chicago	2.02	129,162.50
Farm property		
Urbana-Champaign	589.35	410,555.46
Experiment fields	713.72	94,447.00
Total	1,328.26	\$ 861,887.29
TOTAL	2,362.15	\$1,015,137.29
Less Sales	402.7	27,700.00
NET TOTAL—1920	1,959.45	\$ 987,437.29

¹By deducting 1.6 acres of Urbana-Champaign property which has been converted into streets the total acreage in 1920 becomes 1,957.85. (See Comptroller's Report, Univ. of Ill., 1918, p. 92)

SUMMARY OF PROPERTY SALES

	Acres	Price
1867	...	....
1868-1904		
City Property		
Item 14, Lot 206.....	.2	\$ 200
Farm Property		
Item 7, Griggs Farm.....	400.0	24,000
Total	400.2	\$24,200
1904-1920		
City Property		
Item 30, Part of Sec. 12.....	2.5	\$ 3,500
Farm Property* . . . . .	...	....
Total	2.5	\$ 3,500
TOTAL	402.7	\$27,700

LIST AND DESCRIPTION OF LANDS ACQUIRED BY
THE UNIVERSITY

I. AT URBANA AND CHAMPAIGN IN 1867

1. (13)⁴⁴ 1867. Commencing at the N W corner of the S W $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 7, Twp. 19 N R 9 #., at a stone placed at the intersection of E Main Street and Wright Street as shown by the plat of the Seminary Addition to Urbana recorded in Book "G" page 208 of the records remaining in the Recorder's Office of said Champaign County, running thence E 462 ft.; thence S 700 ft.; thence W 462 ft.; and thence N 700 ft. to the place of beginning, the said property being known as the Seminary Grounds in the City of Urbana. 7.4 acres, \$40,000.

2. (7) 1867. Beginning at the N E corner of the S W $\frac{1}{4}$ of Sec. 18, Twp. 19, R 9 E, 3d P. M., thence W 80 rods to the centre of the north and south road known as the "Cemetery Road" then S along the centre of said road 107.30 rods,

*See note on page 54

⁴⁴Numbers in parenthesis indicate the order in which the items appear in the Comptroller's Rept., June 30, 1918, p. 64

thence E 80 rods, thence N on the half section line to the place of beginning, containing 53-13/20 acres, more or less, the same being so much of the shares of George and Joel Hormel in the real estate of Joseph Hormel, deceased, as lays east of said Cemetery Road. 53.65 acres, \$5,300.

3. (2) 1867. Beginning at N W corner of S $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 18, Twp 19 N., R 9 E of 3d P. M., running thence S 28 rods, thence E 120 rods, thence N 28 rods, thence W 120 rods to the place of beginning, containing 21 acres, situated in Urbana in the County of Champaign and State of Illinois. 21 acres, \$2,210.⁴⁵

4. (3) 1867. Beginning at N E corner of S $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 18, Twp 19 N., R 9 E of 3d P. M., running thence S 28 rods, thence W 40 rods, thence N 28 rods, thence E 40 rods to the place of beginning, containing 7 acres, situated in Urbana, in the County of Champaign and State of Illinois. 7 acres, \$1,000.⁴⁵

5. (5) 1867. N $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 18, Twp. 19 N, R 9 E of 3d P. M., 80 acres, \$6,000.⁴⁵

6. (4) 1867. N W $\frac{1}{4}$; N $\frac{1}{2}$ S W $\frac{1}{4}$; S $\frac{1}{2}$ of N E $\frac{1}{4}$; N W $\frac{1}{4}$ of S E $\frac{1}{4}$; and N E $\frac{1}{4}$ of N E $\frac{1}{4}$ all in Sec 19, Twp 19 N, R 9 E of 3d P. M., containing 410 acres. It being understood that a strip 4 rods and 20 links wide off the W side of S $\frac{1}{2}$ of Lot 2 of N W $\frac{1}{2}$ and a strip of like width off the W side of N $\frac{1}{2}$ of Lot 2 of the S W $\frac{1}{4}$ of said Sec. 19, containing 4.88, is excepted from this conveyance. 405.12 acres, \$28,700.⁴⁵

7. 1867. S $\frac{1}{2}$; and S $\frac{1}{2}$ N E $\frac{1}{4}$; both in Sec 21, Twp 19 N, R 9 E, 3d P. M. 400 acres, \$24,000.⁴⁶

8. (6) 1867. Lots No 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 in block 53, Seminary addition to Urbana.⁴⁶ Also Lots No 1, 2, 3, 5, 6, 8, 9, 10, 11, 12 in block 52, and Lots 1 and 12 in block 53, Seminary addition to Urbana. 5.2 acres, \$5,100.

9. (1) 1867. Lot 139 of a Subdivision of the S part of Lot 1 of S W $\frac{1}{4}$ of Sec 7 in Twp 19 N, R 9 E of 3d P. M., City of Champaign, County of Champaign, and State of Illinois. .2 acres (Street), \$300.

⁴⁵Donated by Champaign County; estimated value

⁴⁶Donated by Champaign County; estimated value

10. (8) 1867. Lot 174 of a Subdivision of the S part of Lot 1 of the S W $\frac{1}{4}$ of Sec 7, Twp 19 N, R 9 E. .2 acres (Street), \$300.

11. (9) 1867. Lot 208 of a Subdivision of the S part of Lot 1 of the S W $\frac{1}{4}$ of Sec 7, Twp 19 N, R 9 E, of 3d P. M. .2 acres (Street), \$150.

12. (10) 1867. Lot 7 in Block 52 of the Seminary addition to Urbana, as per plot of said addition recorded in said County of Champaign. .2 acres, \$560.

13. (11) 1867. Lot 173 of a Subdivision of the S part of Lot 1 of the S W $\frac{1}{4}$ of Sec 7, Twp 19 N, R 9 E, now comprising a portion of the City of Champaign. .2 acres (Street), \$300.

14. (12) 1867. Lots 206 and 207 of Subdivision of S part of Lot 1, S W $\frac{1}{4}$ of Sec 7, Twp 19 N, R 9 E, 3d P. M. .4 acres (Lot 207 street), \$500.

15. (14-A) 1867. The W $\frac{1}{2}$ of the W $\frac{1}{2}$ of the N E $\frac{1}{4}$ of Sec 18 in Twp 19 N, R 9 E of 3d P. M., save and except the following tracts or pieces of land, to-wit: Commencing at a point 1 chain and 78 links E of the N W corner of above described tract, thence E 2 chains; thence S 2 chains and 50 links; thence W 2 chains; thence N 2 chains and 50 links to a point of beginning; also Lots 1, 2 and W $\frac{1}{2}$ of 3 in block 10; also Lots 1, 5, and 6 in block 11; also Lots 1, 5 and 6 in block 12—also the Right of Way of the Urbana Railroad Company across the N end of tract of land first above described as per plat of Urbana Railroad Company duly surveyed and recorded in office of Recorder of Deeds in the County of Champaign and State aforesaid; said exceptions aforesaid comprising a part or portion of land off the N end of said forty acres first above described. 36.6 acres, \$7,500.

16. (15) 1867. Lot 4 of block 52 of the Seminary addition to Urbana. .2 acres, \$750.

17. (16) 1867. Lots 105 and 106 of a Subdivision of Lot 1, S W $\frac{1}{4}$ of Sec 7, Twp 19 N, R 9 E of the 3d P. M. .4 acres (Street) \$600.

18. (17) 1869. Lots 5 and 6 in Block 11 in the "Urbana Railroad Company's Addition" to the City of Urbana, as appears from the Record of said plat or addition in Record "R"

of Deeds at page 800 of the Records of said County, the said lots being on the N end of the W $\frac{1}{2}$ of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E, 3d P. M. Said Lots 5 and 6 being bounded on the N by the Springfield road, on the S by the Urbana Street Railroad, and on the E and W by University Land. .4 acres, \$400.

19. (18) 1871. Lot 140 of a Subdivision of Lot 1 in the S W $\frac{1}{4}$ of Sec 7, Twp 19 N, R 9 E, of 3d P. M. .2 acres (Street) \$200.

20. (19) 1880. 34 ft. off the W side of Lot 5 in Block 12 in Urbana Railroad Addition to the City of Urbana, Illinois. Also the W $\frac{1}{2}$ of Lot 3 in Block 10 in the Urbana Railroad Addition to the City of Urbana, Illinois. .2 acres, \$150.

21. (20) 1883. E $\frac{1}{2}$ of Lot 5 and all of Lot 6, Block 12, and Lots 1 and 2 in Block 10 and a strip of land 66 ft. E and W by 132 ft. N and S, formerly reserved for a street between said blocks 10 and 12, described as follows: Beginning at the N E corner said Lot 6 in block 12; thence E 66 ft.; thence S 132 ft.; thence W 66 ft. and thence N 132 ft. to place of beginning; all said lots and tracts of land being in what is sometimes called the Urbana Railroad Addition to the City of Urbana, as the same is recorded in Book "R," page 800, of the Record of Champaign County, Illinois. .89 acres, \$450.

22. (21) 1885. Beginning 310 links S and 75 links E of the N W corner of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M. and running S 2 chains; thence E 1 chain; thence N 2 chains; thence W 1 chain to the place of beginning. .2 acres, \$150.

23. (22) 1886. Lots 12, 13, 18 and 19 of Joseph Nelson's addition to the City of Urbana. 2.2 acres, \$830.

24. (23) 1894. Commencing at a stone at the S W corner of the E $\frac{1}{2}$ of S W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M., running thence N to a stone at the N W corner of the E $\frac{1}{2}$ of S W $\frac{1}{4}$ of N E $\frac{1}{4}$, Sec 18, Twp 19 N, R 9 E of 3d P. M., running thence E 201 ft. and 6 in. to a point which would be on the W line of Mathews Ave (formerly Nelson Avenue) extended S from the point where said Avenue is now open to the point of the S line of said E $\frac{1}{2}$ of S W $\frac{1}{4}$ of

N E $\frac{1}{4}$ of said Sec 18, Twp 19 N, R 9 E of 3d P. M., running thence S along the said extended W line of Mathews Avenue to the S line of E $\frac{1}{2}$ of S W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M., thence W to the place of beginning, being 6-1/3 acres, more or less, being situated in the County of Champaign in the State of Illinois. 6.33 + acres, \$4,500.

25. (24) 1901. Beginning 147 $\frac{1}{2}$ ft. E of N W corner of N W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M., and running thence E 100 ft.; thence S 165 ft.; thence W 100 ft.; thence N 165 ft. to a place of beginning. .38 acres, \$3,700.

26. (25) 1901. Beginning at a point 66 ft. E of the N W corner of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M., and running thence E 81 $\frac{1}{2}$ ft.; thence S 165 ft.; thence W 81 $\frac{1}{2}$ ft.; thence N 165 ft. to a place of beginning. .3 acres, \$4,800.

27. (26) 1903. Commencing at a point 205 ft. S of the N W corner of the E $\frac{1}{2}$ of N W $\frac{1}{4}$, N E $\frac{1}{4}$ Sec 18, Twp 19 N, R 9 E of 3d P. M., thence E 198 ft., thence S 268.80 ft., thence W along the creek to a point in the W line of said E $\frac{1}{2}$ of N W $\frac{1}{4}$ of N E $\frac{1}{4}$ of said Sec 18, 249 ft. S of place of beginning, thence N on said line to beginning excepting a piece of land described as follows: Commencing at a point 344 ft. S of N W corner of said E $\frac{1}{2}$ of N W $\frac{1}{4}$ of N E $\frac{1}{4}$ of said Sec 18, Twp 19 N, R 9 E, thence E 198 ft., thence S 60 ft., thence W 198 ft., thence N to a place of beginning, with right of way 10 ft. wide off S side of property on N adjoining. Said land above described being Lot 3 of Subdivision of said E $\frac{1}{2}$ of N W $\frac{1}{4}$ of N E $\frac{1}{4}$, as shown by a plat recorded in Book 10, of Deeds, at page 642 (Goodwin's 2d Addition to Urbana). 1.1 acres, \$7,000.

28. (28) 1903. Commencing 344 ft. S of N W corner of E $\frac{1}{2}$ of N W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M., thence E 198 ft., thence S 60 ft., thence W 198 ft., thence N to the point of commencing, with right of way 10 ft. wide off S side of property on the N adjoining. .27 acres, \$5,500.

29. (14-B) 1903. A strip of ground forty feet wide and extending from Wright Street in Champaign E to what is known as Nelson or Mathews Avenue in Urbana and located in the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M. .81 acres, Gift.

II. IN CHICAGO, 1868-1904

30. (36) 1896. W $\frac{1}{2}$ of E $\frac{1}{2}$ of N W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 12, Twp 38 N, R 13 E of 3d P. M.; also lots 4 and 5 in block 5 of McBride, Spencer and Underwood's Subdivision E of Archer Avenue, in E $\frac{1}{2}$ of N W $\frac{1}{4}$ of Sec 1, Twp 38 N, R 13 E of 3d P. M. 2.64 acres, \$2,300.⁴⁷

III. LANDS ACQUIRED AT URBANA AND CHAMPAIGN

FROM 1904-20

31. (27) 1905. Lots 4 and 5 of Joseph Nelson's Addition to the City of Urbana in the County of Champaign, State of Illinois. 1.1 acres, \$15,000.

32. (30) 1907. The N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 19, Twp 19 N, R 9 E of the 3d P. M. 40 acres, \$12,000.

33. (46) 1911. N E $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 19, Twp 19 N, R 9 E of 3d P. M., containing 40 acres more or less. 40 acres, \$20,000.

34. (51) 1911. Beginning 8 rods S of N E corner of Lot 1 of Wm. M. Goodwin's Second Addition to Urbana, thence W 8 rods, thence S 100 ft., thence E 8 rods, thence N 100 ft. to the place of beginning. .3 acres, \$2,500.

35. (52) 1911. Commencing at a point 232 ft. S of N E corner of Lot 1 of Wm. M. Goodwin's Second Addition to Urbana, thence W 8 rods, thence S 65 ft., thence E 8 rods, thence N 65 ft. to the place of beginning. .19 acres, \$5,600.

36. (47) 1911. Beginning at a point 8 rods S and 8 rods W of N E corner of Lot 1 of Wm. M. Goodwin's Second Addition to the town (now city) of Urbana and running along W 8 rods, thence S 10 rods, thence E 8 rods, thence N 10 rods to the place of beginning, containing $\frac{1}{2}$ acre more or less. .50 acres, \$1,800.

37. (48) 1911. Beginning 126 ft. S of N W corner of Lot 2 in Wm. M. Goodwin's Second Addition to the City of Urbana, thence E 2 chains, thence S 66 ft., thence W 2 chains, thence N 66 ft. to the place of beginning, situated in the City of Urbana and County of Champaign. .2 acres, \$4,350.

⁴⁷Estimated value. See Comptroller's Report, 1913, p. 92



*Horticulture Field
Laboratory*



Horse Barn



Poultry Houses



Animal Husbandry Feeding Barns



Dairy Barns



Dairy Barns



Animal Husbandry Silos

38. (49) 1911. Beginning at the N E corner of Lot 1 of Wm. M. Goodwin's Second Addition to Urbana, running thence S 8 rods, thence W 8 rods, thence N 8 rods, thence E 8 rods to the place of beginning, situated in the City of Urbana and County of Champaign. .4 acres, \$4,450.

39. (50) 1911. Beginning 192 ft. S of N W corner of Lot 2 in W. M. Goodwin's Second Addition to the City of Urbana, thence E 2 chains, thence S 95.76 ft., thence W 2 chains, and from thence N 82.56 ft. to the place of beginning, situated in the City of Urbana, in the County of Champaign and in the State of Illinois. Also all right and title to 7 ft. and 2 inches off the E side of Mathews Ave. contiguous upon the W to the above described premises as released by ordinance adopted by the City Council of the City of Urbana, May 2, 1910, and approved by the Mayor of the said City, May 3, 1910. .27 acres, \$6,450.

40. (56) 1912. The N 8 rods of the W 8 rods of Lot 1, and the N 126 ft. of Lot 2, and 7 ft. and 2 inches off the E side of Mathews Ave. where the said Ave. is contiguous to said above described premises, all in William M. Goodwin's Second Addition to Urbana, Illinois. .78 acres, \$10,800.

41. (62) 1913. Lot 4 in William M. Goodwin's Addition to the City of Urbana, Illinois, situated in the City of Urbana, Illinois, County of Champaign, State of Illinois. .4 acres, \$5,000.

42. (65) 1913. Lot 3 and the W $\frac{1}{2}$ of Lot 2 in William M. Goodwin's Addition to the City of Urbana, Illinois. .4 acres, \$11,000.

43. (63) 1913. Lot 4 in Block 6 in the Urbana Railroad Company's Addition to Urbana. .2 acres, \$3,500.

44. (64) 1913. All of lot 5 in Block 6 in the Urbana Railroad Company's Addition to Urbana except by the E 1 foot thereof. .2 acres, \$2,600.

45. (76) 1913. The N 115 ft. of Lot 6 and the E 1 foot of Lot 5 in Block 6 in the Urbana Railroad Company's Addition to Urbana. .15 acres, \$3,000.

46. (66) 1913. The E $\frac{1}{2}$ of the S 60 ft. of the N 124 $\frac{1}{2}$ ft. of Lot 2 of William M. Goodwin's 1st Addition to Urbana.

The N 59 $\frac{1}{2}$ ft. of the S 119 $\frac{1}{2}$ ft. of Lot 1 in William M. Goodwin's Addition to Urbana.

The E 77 ft. to Lot 2 in Block 2 in Purpee, Curtiss and Somers Addition of out-lots to the City of Urbana. .85 acres, \$4,450.

47. (67) 1913. The S 55 ft. of the E $\frac{1}{2}$ of Lot 2 of William M. Goodwin's Addition to the City of Urbana, situated in the City of Urbana, County of Champaign, and State of Illinois. .12 acres, \$1,500.

48. (68) 1913. The N $\frac{1}{2}$ of Lots 1 and 2 in Block 4 in the Urbana Railroad Company's Addition to Urbana, situated in the City of Urbana, County of Champaign, and State of Illinois. .2 acres, \$3,500.

49. (69) 1913. The N 60 ft. of Lot 1 of William M. Goodwin's Addition to the City of Urbana. .2 acres, \$1,450.

50. (70) 1913. The S 60 ft. of Lot 1 of William M. Goodwin's Addition to Urbana, Illinois, situated in the City of Urbana, County of Champaign and State of Illinois. .2 acres, \$1,800.

51. (71) 1913. Lot 7 in Block 55 in the Seminary Addition to the City of Urbana, Illinois. .15 acres, \$5,000.

52. (72) 1913. Lot 8 in Block 55 in the Seminary Addition to Urbana, situated in the City of Urbana, County of Champaign and State of Illinois. .15 acres, \$6,800.

53. (73) 1913. Lot 9 in Block 55 in the Seminary Addition to Urbana, Illinois. .15 acres, \$4,800.

54. (74) 1913. Lot 5 in Block 55 in the Seminary Addition to Urbana, Illinois. .15 acres, \$2,500.

55. (75) 1914. Lot 6 in Block 55 in the Seminary Addition to the City of Urbana, Illinois. .15 acres, \$2,850.

56. (78) 1914. Lot 3 in Block 55 in the Seminary Addition to the City of Urbana, Illinois. .15 acres, \$2,600.

57. (79) 1914. Block 6 of J. S. Wright's Addition to the City of Champaign, except the N 14 ft. thereof. 1.16 acres, \$14,000.

58. (80) 1913. Beginning at the S E corner of Sec 18, Twp 19 N, R 9 E of 3d P. M., thence N 52 rods, thence W 40 rods, thence S 52 rods, thence E 40 rods to the place of beginning, and containing 13 acres more or less. 13 acres, \$20,481.33.

59. (81) 1913. N W $\frac{1}{4}$ of Sec 20, Twp 19 N, R 9 E of 3d P. M., situated in County of Champaign, State of Illinois. 160 acres, \$160,000.

60. (84) 1913. N W $\frac{1}{4}$ of S W $\frac{1}{4}$ of Sec 20, Twp 19 N, R 9 E of 3d P. M. 40 acres, \$24,000.

61. (83) 1913. The S $\frac{1}{2}$ of the S W $\frac{1}{4}$ of Sec 20, Twp 19 N, R 9 E of 3d P. M. 80 acres, \$48,000.

62. (82) 1913. The N E $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 20, Twp 19 N, R 9 E of the 3d P. M., containing 40 acres. 40 acres, \$24,074.13.

63. (85) 1913. Lot 2 of a Subdivision of the S $\frac{1}{2}$ of Sec 13, Twp 19 N, R 8 E of the 3d P. M. 10 acres, \$7,705.81.

64. (90) 1914. Lots 5 and 6 in Block 1, in Joseph Nelson's Addition to Urbana, described as commencing at a point on Sec line 16 rods W of the N E corner of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of the 3d P. M., thence W 8 rods, thence S 10 rods, thence E 8 rods, thence N 10 rods to beginning. .4 acres, \$10,000.

65. (87) 1914. Lot 23 in the Forestry Heights Addition to the City of Urbana. .22 acres, \$3,601.59.

66. (88) 1914. Lot 24 of the Forestry Heights Addition to Urbana, Illinois. .22 acres, \$3,601.59.

67. (89) 1914. Lot 25 in the Forestry Heights Addition to Urbana, Illinois. .22 acres, \$3,601.60.

68. (93) 1915. Lots 1, 2 and 3, Block 6 in the Urbana Railroad Company's Addition to the City of Urbana, Illinois; being a part of the N E $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M. .6 acres, \$10,116.88.

69. (94) 1915. S 5 acres of Lot 9, also the S 3.73 acres of Lot 10, also all of Lot 12 in William Williamson's Subdivision of the W $\frac{1}{2}$ of the S W $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of 3d P. M. Also beginning at a point 6.22 chains N of the S W corner said Sec 18, running thence N 7.08 chains to a stone, thence E 9.35 chains to a stone, thence S 7.08 chains to a stone, thence W 9.35 chains to place of beginning. 32.35 acres, \$50,000.

70. (110) 1916. Lots 1, 2 and 3 of Joseph Nelson's Addition to Urbana, as shown by plat dated May 1, 1869, and recorded in Book 18, page 224 of the Records of Champaign County, Illinois, in the City of Urbana. .6 acres, \$12,000.

71. (101) 1916. The S E $\frac{1}{4}$ of N E $\frac{1}{4}$ and the N E $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 24, Twp 19 N, R 8 E of 3d P. M., and all that

part of the S W $\frac{1}{4}$ of the N W $\frac{1}{4}$ and all that part of the N W $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 19, Twp 19 N, R 9 E of 3d P. M., lying W of the public highway known as the 1st Street Road, all of said premises being otherwise described as, beginning at the N W corner of the S E $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 24, thence S 160 rods, thence E 84 rods and 20 links, to the public highway, thence N along the line of said highway 160 rods to the highway running E and W, thence W to the place of beginning, all of said premises lying and being in the County of Champaign and State of Illinois, together with all the appurtenances and hereditaments thereto belonging. 84 acres, \$34,000.

72. (97) 1917. E 35 ft. of Lots 4 and 5 in Block 4 of Nina B. Bronson's Subdivision of part of the E $\frac{1}{2}$ of S W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of the 3d P. M. .12 acres, \$1,400.

73. (98) 1917. Lot 2 in Block 4 of Nina B. Bronson's Subdivision of a part of the E $\frac{1}{2}$ of the S W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of the 3d P. M. in the City of Urbana. .24 acres, \$16,500.

74. (99) 1917. Lot 3 in Block 4 in Nina B. Bronson's Subdivision of a part of the E $\frac{1}{2}$ of the S W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of the 3d P. M., situated in the City of Urbana. .24 acres, \$3,869.

75. (100) 1917. The S $\frac{1}{2}$ of the N W $\frac{1}{4}$ of the S W $\frac{1}{4}$ of the N $\frac{1}{2}$ of the S W $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 1, Twp 19 N, R 9 E of the 3d P. M., in the County of Champaign and State of Illinois. 40 acres, \$12,000.

75a. (115)* 1918. The N $\frac{1}{2}$ of the N W $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 1, Twp 19 N, R 9 E of the 3d P. M. (Adjoins and completes the previous item; used for research in natural science.) 20 acres, \$6,000.

76. (102) 1917. The N $\frac{1}{2}$ of S W $\frac{1}{4}$ of Block 13 of J. S. Wright's Addition to the City of Champaign. .34 acres, \$6,500.

77. (103) 1917. Lots 70 and 75 in College Place, an Addition to the City of Champaign, being a part of the N W fractional quarter of the S W $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E, of the 3d P. M. .28 acres, \$3,639.14.

78. (104) 1917. Lots 71 and 72 in College Place, an Addition to the City of Champaign, being a part of the N W frac-

*Comptroller's Report, 1919, p. 48

tional quarter of the S W $\frac{1}{4}$ of Sec 18, Twp 19 N, R 9 E of the 3d P. M. .31 acres, \$6,005.58.

79. (108) 1918. Lots 73 and 74 in College Place Addition to the City of Champaign, Illinois. .31 acres, \$6,231.34.

80. (111) 1918. Lot Four (4) in Block 55 in the Seminary Addition to the City of Urbana, Illinois. .15 acres, \$3,250.

81. (112) 1918. The S $\frac{1}{2}$ of Lots 1 and 2 in Block 4 of the Urbana Railroad Company's Addition to Urbana, Illinois. .2 acres, \$2,400.

IV. LAND ACQUIRED OUTSIDE URBANA AND CHAMPAIGN 1904 TO 1920

1. IN CHICAGO

82. (96) 1913. Lots 15 and 16, 17, 18 in Balestier's Subdivision of Block 23 in Ashland 2nd Addition to Chicago according to the plat entitled "Balestier's subdivision of Blocks 11, part of 14, 18, E $\frac{1}{2}$ of 19, 22 and all of 23 in Ashland 2nd Addition to Chicago, recorded in the Recorder's Office of Cook County, in the State of Illinois in Book 166 of Maps, pages 70 and 71, and recorded in the same office in Book 14 of Plats, page 85: Also Lots 1 to 7 inclusive, in Block 23, also sublots 1 to 7 inclusive of Lots 19 to 25 inclusive, in Block 23 and the vacated alley running N and S through said Block 23 in the Ashland 2nd Addition to Chicago, in the W $\frac{1}{2}$ of the N E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P M, including the buildings thereon, together with the furniture, fixtures and apparatus therein, and all the right of way over any alleys adjacent to said buildings now held by the grantor. 1.16 acres, \$60,000.

83. (95) 1915. Lots 14, 15 and 16 in Carpenter's Re-subdivision of the W half of Block 5 in Assessor's Division of the E half of the S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M. .21 acres, \$16,000.

84. (95-A) 1915. Lots 12 and 13 and the S 1 and 3-12 ft. of Lot 14 in the Re-subdivision of the W $\frac{1}{2}$ of Block 5 in the Assessor's Division of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M. .14 acres, \$9,000.

85. (95-B) 1915. Lots 9, 10, 11 in Carpenter's Re-subdivision of W $\frac{1}{2}$ of Block 5 in Haddock's Subdivision into

Blocks 4, 5 and 17 of that part of E $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M., set off to said Haddock in partition of said tract by order of Superior Court of Chicago, July 7, 1859, Cook County. .21 acres, \$10,000.

86. (105) 1917. Lots 7 and 8 and the N 10 ft. of Lot 6, with the improvements situate thereon, known as numbers 721 and 725 S. Wood Street, Chicago, Illinois, in the Re-subdivision of the W $\frac{1}{2}$ of Block 5 in the Assessor's Division of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M. .17 acres, \$16,676.67.

87. (106) 1917. Lots 4 and 5 in Eisenstein's Re-subdivision of Lots 1, 2, 3 and 4 and S 15 ft. of Lot 5 in Carpenter's Re-subdivision of the W $\frac{1}{2}$ of Block 5 in Assessor's Division of E $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M. .13 acres, \$14,248.33.

87a. (113)* 1918. Lot 9 in the E $\frac{1}{2}$ of Block 5, in Haddock's subdivision of Blocks 4, 5, and 17, in the Assessor's Division of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M. (Located at 720 S. Hermitage Ave., Chicago.) .07 acres, \$1,337.50.

87b. (114)* 1918. The N 10 feet of Lot 5 and the S 15 feet of Lot 6 in the Re-subdivision of the W $\frac{1}{2}$ of Block 5 in the Assessor's Division of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 18, Twp 39 N, R 14 E of the 3d P. M. (Located at 727-729 S. Wood St., Chicago.) .07 acres, \$1,800.

2. EXPERIMENT FIELDS

88. (29) 1905. Beginning at a point 20 ft. E of the N W corner of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 9, run thence S 350 ft., thence E 1062 ft. to the W line of the right-of-way of the Cleveland, Cincinnati, Chicago & St. Louis Railway Company, thence run along the said line of right-of-way in a northwesterly direction 1173 ft., thence run in a southwesterly direction in the S W $\frac{1}{4}$ of the S E $\frac{1}{4}$ of Sec 4, 868 ft. to the place of beginning, containing 16 acres more or less. All of said

*Comptroller's Report, 1919, page 48

land is situated in Twp 13 S of the base line, R 3 E of 3d P M. 16 acres, \$320.⁴⁸

89. (31) 1909. The S 15 acres of N E $\frac{1}{4}$ N W $\frac{1}{4}$ Sec 22, Twp 8 S, R 6 E, 3d P. M. 15 acres, \$750.⁴⁸

90. (32) 1909. The E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 11, Twp 5 S and R 3 E of 3d P. M. 20 acres, \$1,000.⁴⁸

91. (33) 1909. W $\frac{1}{2}$ S W $\frac{1}{4}$ Sec 36 (except 10 acres out of N E corner) also tract commencing at point 12 chains S of N W corner of E $\frac{1}{2}$ S W $\frac{1}{4}$ Sec 36, Twp 4 N, R 10 E, thence running S 28 chains and 19 links, thence E 4 chains and 26 links, thence N 28 chains and 19 links, then W 4 chains and 26 links to the beginning; contains 12 acres more or less; also another tract commencing at the N E corner S E $\frac{1}{4}$ Sec 35, Twp 4 N, R 10 E, thence S 40 chains to the Twp line (Twp 4), thence W 1 chain, thence N 40 chains, thence E 1 chain to beginning (except 11 acres at N W corner). 86 acres, \$4,875.

92. (34) 1909. 15 acres of land in N E corner of the N E $\frac{1}{4}$ of Sec 11, Twp 28 N, R 1 E of the 3d P. M., said tract of land being more particularly described as follows: Beginning at the N E corner of the said N E $\frac{1}{4}$ of Sec 11, running thence W along the N line of said N E $\frac{1}{4}$ 80 rods, thence S parallel with the E line of said Sec 11 30 rods, thence E parallel with the N line of said Sec 11, 80 rods to the E line of said Sec 11, thence N along the E line of said N E $\frac{1}{4}$ of Sec 11, 30 rods to the place of beginning. 15 acres, \$3,000.⁴⁹

93. (35) 1909. Commencing at the N E corner of the N W $\frac{1}{4}$ of Sec 36, Twp 18 N, R 10 E of 4th P. M., County of Bureau and State of Illinois, thence W along the N line of said $\frac{1}{4}$ section 60 rods, thence S 53- $\frac{1}{3}$ rods, thence E 60 rods, thence N along the E line of said $\frac{1}{4}$ section 53- $\frac{1}{3}$ rods to a point of beginning comprising a tract of 20 acres. 20 acres, \$4,000.⁴⁹

94. (37) 1910. 20 acres out of the S E part of Sec 18, Twp 14 N, R 3 W, 4th P. M., beginning at the tile set 2 chains and 5 links N of S E corner of said Sec 18 and on the N boundary of the highway, thence N along the E line of said Sec 18, 9 chains and 89 links to tile set in the ground, thence W 19 chains and 22 links to tile set in the ground, thence S 10 chains and 89

⁴⁸Donated for Agricultural Experiment Field; estimated value

links to tile set in the ground on N boundary of public highway, thence in an easterly direction along N boundary of highway 19 chains and 31 links to place of beginning. 20 acres, \$6,500.⁴⁹

95. (38) 1910. A part of the N $\frac{1}{2}$ N W $\frac{1}{4}$ Sec 35 Twp 24 N, R 9 E 4th P. M., described as follows: Commencing at a point on N line of said section, 12 $\frac{1}{2}$ chains W of N E corner N W $\frac{1}{4}$ of said Section and running thence W on Sec line 15 chains, thence S 13- $\frac{1}{3}$ chains, thence E parallel to the section line 15 chains, thence N 13- $\frac{1}{3}$ chains to the place of beginning. 20 acres, \$3,500.⁴⁹

96. (39) 1910. Lot 4 in the subdivision of the W $\frac{1}{2}$ of the S W $\frac{1}{4}$ of Sec 19 in Twp 5 N, R 6 W of the 4th P. M., according to a survey and plat thereof made by George W. Payne, Surveyor, and recorded in Plat Book 5, page 18, in the Recorder's office of Hancock Co., Illinois, said lot containing 20 acres situated in the County of Hancock and State of Illinois. 20 acres, \$4,000.⁴⁹

97. (40) 1910. Commencing 13 chains and 50 links W of the N E corner of Sec 2, Twp 3 N, R 10 E, thence running W 5 chains and 92 links to the N W corner of N E $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 2, Twp 3 N, Range 10 E, thence running S 22 chains and 60 links to the S W corner of a 44 acre tract, thence running E 9 chains and 91 links, thence running N 14 chains and 36 links; thence W 4 chains, N 8 chains and 25 links to the place of beginning. Containing 19- $\frac{1}{3}$ acres off of the W side of the N E $\frac{1}{4}$ of the N E $\frac{1}{4}$. 19.33 acres, \$1,800.

98. (41) 1910. A part of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 26, Twp 22 N, R 8 E of 4th P. M., bounded as follows, to-wit: Commencing at a point on the E line of the aforesaid section, at the intersection of said section line with north boundary line of public highway known as the Dixon and Sterling road, the said starting point being located at a distance of 331 ft. N of S E corner of said section; thence running N upon E line of said section 1506 ft., thence W at right angles with E line of said section 660 ft., thence S parallel with E line of said section 1320 ft., to the N boundary of above mentioned highway, and thence in an easterly direction along the N boundary of said

⁴⁹Donated for Agricultural Experiment Field; estimated value

public highway 685.25 ft. to place of beginning, containing 21.41 acres, more or less, also conveying all right and title to land lying N of center of said public highway and S of premises above described, all of said premises being situated in County of Lee and State of Illinois. 21.41 acres, \$4,282.⁵⁰

99. (42) 1910. 20 acres off the W end of the N $\frac{1}{2}$ S W $\frac{1}{4}$ of Sec 35, Twp 1 N, R 5 W, of 4th P. M., situated in County of Adams and State of Illinois. 20 acres, \$4,000.⁵⁰

100. (43) 1910. Parts of lots 43-4 in S W $\frac{1}{4}$ Sec 19, Twp 2 N, R 6 W of 3d P. M., described as follows: Beginning 325 ft. S of intersection of S line of Second S. Street and E line of right-of-way of E. St. Louis and Suburban R. R. Company, thence S along E line of said railway 743.03 ft., thence E parallel with S line of Second S. Street 1172.5 ft., thence N parallel with E line of said railway 743.03 ft., thence W 1172.5 ft. to place of beginning. 20 acres, \$3,000.⁵⁰

101. (44) 1910. All of the N $\frac{1}{2}$ of the S W $\frac{1}{4}$ of the N W $\frac{1}{4}$ of Sec 15, Twp 16 S, R 6 E, also five acres on the S side of the S $\frac{1}{2}$ of the N W $\frac{1}{4}$ of the N W $\frac{1}{4}$ of Sec 15, Twp 16 S, R 6 E. 25 acres, \$1,800.⁵⁰

102. (45) 1911. Twenty acres off the S side of the N E $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 1, Twp 6 N, R 14 W of the 2d P. M., situated in the County of Crawford and State of Illinois. 20 acres, \$1,500.⁵⁰

103. (53) 1911. The E 30 acres of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 3, Twp 6 N, R 9 E of 3d P. M., situated in the County of Jasper. 30 acres, \$1,800.⁵⁰

104. (54) 1911. Commencing at a point on the N line of Sec 15, Twp 11 N, R 1 E of 3d P. M., 1718 ft. W of the N E corner of the N W $\frac{1}{4}$ of said Sec 15, thence easterly along said N line of said section (on or near the centre line of the public highway) 1652 ft. thence southerly 33 ft. more or less to the S line of said public highway, thence southerly on a line parallel with the E line of said N W $\frac{1}{4}$ of said Section 740 ft., thence westerly on a line parallel with the said N line of said section 1652 ft. more or less to the E line of the public highway laid out and dedicated to the public by Baldwin & Baldwin, thence

⁵⁰Donated for Agricultural Experiment Field; estimated value

N along the E line of said last mentioned highway 740 ft., to the S line of said public highway along the N line of said Section, thence N 33 ft. more or less, to the place of beginning; containing in all 29.31 acres more or less, situated in the County of Christian and State of Illinois. 29.31 acres, \$3,000.⁵¹

105. (55) 1911. The S $\frac{1}{2}$ of the S W $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 22, Twp 21 N, R 3 W of the 3d P. M., in Logan County, State of Illinois, being 20 acres more or less, for the purpose of an experiment farm or field. 20 acres, \$4,500.⁵¹

106. (57) 1912. The E $\frac{1}{2}$ of the N E $\frac{1}{4}$ of the S E $\frac{1}{4}$ of Sec 9, Twp 5 S, R 8 E of the 3d P. M., White County, Illinois, 20 acres, \$1,500.⁵¹

107. (58) 1912. Twenty-four (24) acres off the W end of the S $\frac{1}{2}$ of the N E $\frac{1}{4}$ of Section 18, Twp 1 N, R 11 E. 24 acres, \$1,920.⁵¹

108. (59) 1912. A part of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 22, Twp 17 N, R 13 W of the 2d P. M., beginning at the S W corner of said E $\frac{1}{2}$ of said S E $\frac{1}{4}$, thence E on the S line thereof 30.3 rods, thence N parallel to the W line of said E $\frac{1}{2}$ to the S boundary line of the right-of-way of the Chicago & Eastern Illinois R. R. as the same is now located across said E $\frac{1}{4}$, thence southwesterly along said S boundary line of said right-of-way to the W line of said E $\frac{1}{2}$ of said S E $\frac{1}{4}$, thence S with the W line of said E $\frac{1}{2}$ to the place of beginning, situated in the County of Vermilion in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of this State. 20 acres, \$6,500.⁵¹

109. (60) 1913. 17 acres of even width off the S side of the N E $\frac{1}{4}$ of the S W $\frac{1}{4}$ of Sec 31, Twp 10, R 9 E, of 3d P. M., situated in the County of Cumberland. 17 acres, \$1,600.⁵¹

110. (61) 1913. Commencing at a point 1193.5 ft. W of the S E corner of the N W $\frac{1}{4}$ of Sec 23, Twp 11 N, R 5 W of the 4th P. M., and running thence W 907.5 ft., thence N 962.5 ft., thence E 907.5 ft., thence S 962.5 ft. to the place of beginning, containing twenty acres more or less. 20 acres, \$500.⁵²

111. (77) 1914. A part of the W half of the S W $\frac{1}{4}$ of Sec 34, Twp 16 N, R 11 E of 4th P. M., described as follows,

⁵¹Donated for Agricultural Experiment Field; estimated value

to-wit: Commencing at a point on the E line of the W $\frac{1}{2}$ S W $\frac{1}{4}$ of said Sec 34, 150 ft. S of the N E corner of the said W $\frac{1}{2}$ of said S W $\frac{1}{4}$ Section, and running thence W 435.92 ft., thence S 177.52 ft., thence W 133 ft., to a point which is 327.52 ft. S of the N W corner of Lot 2 in the S W $\frac{1}{4}$ of said Sec 34, and thence S 1180.61 ft., thence E 562.92 ft., and thence N to the point of beginning containing 17.093 acres more or less. 17.093 acres, \$4,000.⁵²

112. (86) 1913. Commencing at the S W corner of the N W $\frac{1}{4}$ of Sec 31, Twp 36 N, R 10 E of the 3d P. M., thence E on the S line of said $\frac{1}{4}$ section, 2,050 ft., thence N on a line parallel with the W line of said $\frac{1}{4}$ section 658.75 ft.; thence W on a line parallel with the S line of said $\frac{1}{4}$ section, 2,050 ft. to the W line thereof, and thence S on the W line of said $\frac{1}{4}$ section 658.75 ft. to the place of beginning; also commencing at the N E corner of the 31 acre tract above described, and running thence W on the N line thereof 3 rods, thence N to the center of the Plainfield Road, thence southeasterly in the center of said road to a point directly N of the place of beginning and thence S 100.75 ft. to the place of beginning. 31 acres, \$8,000.⁵²

113. (91) 1914. The N 20 acres of the W $\frac{1}{2}$ of the N W $\frac{1}{4}$ of Sec 18, Twp 14 N, R 5 E of the 4th P. M. 20 acres, \$5,000.⁵²

114. (92) 1915. A tract of land in the S E $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 36, Twp 4 S, R 6 W, Randolph County, Illinois, more particularly described as: Beginning at a stone at N W corner of S E $\frac{1}{4}$ of the S E $\frac{1}{4}$ of Sec 36, thence running E along the N line of said S E $\frac{1}{4}$ of the S E $\frac{1}{4}$ of Sec 36 for a distance of 1177.5 ft., thence S parallel to and 147.5 ft. W of E line of Sec 36 for a distance of 727.5 ft., thence W parallel to and 592.5 ft. N of the S line of Sec 36 for a distance of 1181 ft. to the W line of said S E $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 36, thence N along said W line of the S E $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 36 for a distance of 727.5 ft. to the point of beginning. 20 acres, \$3,000.⁵²

115. (107) 1917. The W part of the E $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 14, Twp 12 S, R 8 E, and more particularly described

⁵²Donated for Agricultural Experiment Field; estimated value

by metes and bounds as follows: Beginning at the S W corner of the S E $\frac{1}{4}$ of S E $\frac{1}{4}$ of above Sec, thence running N 79 degrees, E 4.00 chains, thence N 58 degrees, E 7.70 chains, thence N 21.00 chains, thence W .40 chains, thence N 14.70 chains, thence W 9.93 chains, thence S 40.55 chains to the place of beginning, containing 32.58 acres more or less. 32.58 acres, \$1,300.⁵³

116. (109) 1917. The E $\frac{1}{2}$ of the S $\frac{1}{2}$ of the S E $\frac{1}{4}$ of Sec 14, Twp 5 N, R 6 W of the 3d P. M., containing 40 acres, \$6,000.⁵³

116a. (116)* 1919. Beginning at a point $13\frac{1}{2}$ rods N and 287.6 ft. W of the S E corner of the S W $\frac{1}{4}$ of Sec 34, Twp 7 N, R 11 W of the 2d P. M., running thence W 229.4 ft., thence N 397.25 ft., thence W $62\frac{2}{3}$ rods, thence S 620 ft., thence E $76\frac{1}{5}$ rods, thence N $222\frac{3}{4}$ ft. to place of beginning. (Located near Palestine, Crawford County, Illinois.) 15 acres, \$1,500.⁵³

3. LAND ACQUIRED BY GIFT FOR SPECIAL PURPOSE

117. 1914. The S W $\frac{1}{4}$ and W $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 26, Twp 20 N, R 10 E of 3d P. M., Champaign County, (near St. Joseph, Illinois). 240 acres, \$54,000.⁵⁴

118. 1914. Champaign County—All that part of N $\frac{1}{2}$ of Sec 23, Twp 22 N, R 9 E of 3d P. M., which lies west of the Illinois Central right-of-way. 214 acres, \$53,000.⁵⁴

119. 1914. The N W $\frac{1}{4}$ and S $\frac{1}{2}$ of N E $\frac{1}{4}$ Sec 31, Twp 22 N, R 8 E of 3d P. M., less Illinois Central right-of-way, Champaign County. (Adjoining Fisher, Illinois.) 234.19 acres, \$72,000.⁵⁴

120. 1914. The E $\frac{1}{2}$ of S W $\frac{1}{4}$ of Sec 14, Twp 19 N, R 8 E of 3d P. M., Champaign County. (Adjoining Champaign, Illinois.) 80 acres, \$36,000.⁵⁴

*Comptroller's Report, 1919, p. 48

⁵³Donated for Agricultural Experiment Field; estimated value

⁵⁴Donated by Captain T. J. Smith of Champaign to provide funds for the erection of a Memorial Music Building; estimated value. See Comptroller's Report, 1918, p. 104

CHAPTER III

BUILDINGS AND EQUIPMENT

One of the items contained in the offer of Champaign County in 1867 to secure the location of the University was "the Urbana and Champaign Institute buildings and grounds." There was however but one building—a brick structure one hundred twenty-five feet in length and five stories in height. According to the early catalogs of the University, the public rooms of this building were sufficient for the accommodation of over four hundred students and it had private study and sleeping rooms for one hundred thirty.

The first legislature which met after the organization of the University appropriated \$25,000 for barns, tools, etc., for the agricultural department, and \$20,000 for a greenhouse, barns, trees, etc., for the horticultural department. The next legislature, meeting in 1871, appropriated \$25,000 for a building to be used as a drill hall for the military department and as a shop for the department of mechanical science and engineering. It appropriated also the first \$75,000 for a main building to cost \$150,000.¹ The next legislature, however, appropriated only \$41,550 for the completion and equipment of the latter building.²

Succeeding legislatures appropriated funds from time to time for the erection of minor buildings, but with the exception of a chemical laboratory in 1878 costing \$40,000 no large building was provided for during the sixteen years from 1873 to 1889. In the latter year \$10,000 was appropriated for an armory, and scarcely a legislature since that time has failed to provide funds for one or more University buildings.

A complete list of the principal buildings which have been erected by the University and which are still in use is here given.

It should be added that besides the buildings enumerated in the following lists certain others no longer in existence have been occupied by the University for various periods of time.

¹Rept., Univ. of Ill., 1870-71, pp. 15-16

²Rept., Univ. of Ill., 1872-3, p. 148

Thus the original "Champaign and Urbana Institute building" was used from 1868 until 1880, but was so badly damaged by storms during the spring of the latter year³ that it could not longer be occupied and was soon afterward razed.

In 1899 the building which had been erected in 1872 at a cost of \$25,000 to accommodate the wood shops and to serve as a drill hall was totally destroyed by fire.⁴

Fire destroyed also the Experiment Station barn in 1889⁵ and the Animal Husbandry barn in 1910.⁶

In August of 1890 the Chemical Laboratory was damaged to the extent of \$40,000 by fire caused by lightning, and in the following June the University suffered a loss of \$75,000 by the partial destruction of the Natural History building by fire originating in the same manner.⁷

It should be noted that, although the University is not permitted to insure its buildings, on the theory that "the state is carrying its own insurance," no fund is provided for replacing automatically any building that has been burned, nor can the necessary funds be taken from the state treasury for this purpose except by specific appropriation at some subsequent legislative session.

UNIVERSITY BUILDINGS ERECTED FROM 1867 TO 1904

Date of Erection		Original Cost
1873	University Hall	\$ 150,000
1878	Law Building (formerly Chemistry Laboratory)....	40,000
1890	Men's Gymnasium Annex (formerly Armory).....	16,000
1890	Implement Shed (South Farm).....	500
1890	Animal Husbandry House (South Farm).....	1,500
1892	Natural History Building.....	70,000
1893	Dairy Barn (Pure Bred Cattle).....	7,500
1894	Engineering Hall	160,000
1895	Metal Shops	20,000
1895	Horse Barn (General).....	3,090
1896	Observatory	15,000
1896	President's House (old).....	15,000

³Rept., Univ. of Ill., 1880, p. 17

⁴Rept., Univ. of Ill., 1900, p. 301

⁵Rept., Univ. of Ill., 1890, p. 95

⁶Rept., Univ. of Ill., 1912, p. 506

⁷Alumni Record, Univ. of Ill., 1913, pp. 46, 47

Buildings and Equipment

79

Date of Erection		Original Cost
1897, 1902	Old Power Plant.....	20,000
1897	Greenhouse (University)	7,800
1897	Library	160,000
1898	Electrical Laboratory	40,000
1900	Agricultural Building	165,000
1901	Gymnasium, Men's	50,000
1901	Pumping Station	8,000
1902	Chemistry Laboratory	130,000
1902	Laboratory of Applied Mechanics.....	30,000
1902, 1904	Wood Shop and Foundry.....	42,000
1903	Swine Sheds	2,000

Total cost of buildings, 1867 to 1904.....\$1,153,390

BUILDINGS ERECTED FROM 1905 TO 1920

Date of Erection		Original Cost
1905	Agronomy Field Laboratory.....	\$ 17,000
1905	Beef Cattle Barn.....	28,000
1905	Entomology Building (State).....	8,850
1905	Horticultural Field Laboratory.....	18,000
1905	Mechanical Engineering Laboratory (See below)	36,000
1905	Woman's Building (See below).....	80,000
1907	Farm Mechanics Building.....	33,000
1907-13	Dairy Buildings	21,500
1908	Auditorium	135,787.78
1908, '14, '17	Isolation Hospital (formerly Horticultural service building)	3,500
1908, '12, '16	Agricultural Building (addition).....	25,325.09
1909	Natural History Building (addition).....	165,000
1909	Physics Laboratory	220,000
1910	Power Plant (new).....	46,780
1911	Lincoln Hall	234,225
1911	Work Horse Barn.....	1,500
1911-16	Animal Husbandry Barns.....	8,850
1912	Poultry Plant	2,000
1912	Agronomy Greenhouse	12,000
1912	Mining and Ceramics Laboratory.....	25,000
1912	Commerce Building	101,326.03
1912, 1914	Locomotive Testing Laboratory and Reservoir.	34,270
1912	Transportation Building	86,000
1912	Woman's Building (addition).....	136,308.27
1913	Floriculture, Plant Breeding and Vegetable Gardening Group	88,000

Date of Erection		Original Cost
1913	Stock Judging Pavilion.....	111,652.06
1913	Law Building (reconstruction).....	2,460.16
1913	Medical Building (Chicago).....	155,000
1913	Dental Building (Chicago).....	30,000
1913, 1916	Gymnasium, Men's (reconstruction).....	30,554.18
1914	Armory (new)	229,119.17
1914	Storehouse	1,990
1914	Observatories (addition)	2,461.20
1914	Library (addition)	34,739.84
1914, 1916	Gymnasium Annex (reconstruction).....	7,947.32
1914	Administration Building	146,118.90
1914	Botany Laboratory and Greenhouse.....	22,607.85
1915	Chemistry Laboratory (addition).....	354,326.77
1915	Battery F Barn.....	1,381.43
1915	Pharmacy Buildings	61,022.27
1916	Engineering Building (reconstruction).....	1,737.40
1916	Ceramics Laboratory	130,998.79
1916	Vivarium	76,244.25
1916	Genetics Building	10,231.30
1916	Soil Bins	9,941.22
1916	Agronomy Barn	3,056.32
1917	Mechanical Engineering Laboratory (recon- struction)	44,736.16
1917	Women's Residence Hall.....	180,247.32
1917	Cattle Feeding Plant.....	29,625.36
Total		\$3,246,421.44

INVENTORY OF BUILDINGS

June 30, 1918¹

Date of Erection (or acquisition)		Original Cost	Estimated Present Value
LIBERAL ARTS AND SCIENCES GROUP			
1896, 1914	Astronomical Observatories	\$ 17,461.20	\$ 11,056.12
1914	Botany Laboratory and Greenhouse	22,607.85	21,272.86
1902, 1915	Chemistry Building	484,747.53	407,008.84
1905	Entomology Building	8,850.00	6,674.78
1911	Lincoln Hall	234,225.00	211,648.15
1892, 1909	Natural History Building.....	240,286.62	178,447.87
1873	University Hall	150,000.00	22,569.40
1916	Vivarium	76,244.25	74,719.36
Totals		\$1,234,422.45	\$ 933,397.38

¹Cf. Comptroller's Rept., Univ. of Ill., 1918, p. 94



Chemistry

Date of Erection (or acquisition)		Original Cost	Estimated Present Value
ENGINEERING GROUP			
1916	Ceramics Laboratory	130,998.79	128,378.81
1898	Electrical Engineering Laboratory.	40,000.00	19,760.23
1894	Engineering Hall	162,278.40	90,566.39
1902	Laboratory of Applied Mechanics..	30,000.00	22,593.41
1912	Locomotive Laboratory and Reser- voir	34,270.00	31,606.76
1905, 1917	Mechanical Engineering Laboratory	85,671.90	75,425.38
1895	Metal Shops	20,000.00	11,476.78
1912	Mining and Ceramics Laboratory.	25,000.00	18,535.72
1909	Physics Laboratory	220,000.00	180,050.99
1912	Transportation Building	86,000.00	75,775.56
1902, 1904	Wood Shops	42,000.00	29,460.27
Totals		\$ 876,219.09	\$ 683,630.30

AGRICULTURAL GROUP

1900	Agricultural Building	191,407.15	122,972.19
1905	Agronomy Building	17,000.00	13,445.60
1912	Agronomy Greenhouse	12,000.00	5,821.12
1907	Farm Mechanics Building.....	33,000.00	25,114.46
1913	Floriculture Service Buildings and Greenhouse	88,000.00	80,366.27
1916	Genetics Building	10,231.30	9,826.14
1905	Horticulture Building	18,000.00	7,887.85
1913	Stock Judging Pavilion.....	111,652.06	103,872.16
1895	Horse Barn (General).....	3,090.00	1,241.99
1893	Dairy Barn (Pure Bred).....	7,500.00	3,575.42
1905	Beef Cattle Barn.....	28,000.00	21,176.82
1907	Dairy Farm House.....	3,000.00	2,256.94
1907	20 Acre Dairy Barn.....	3,200.00	2,497.04
1912	Dairy Horse Barn.....	2,000.00	1,728.72
1913	Dairy House and Shop.....	2,300.00	2,064.86
1913	Dairy Experiment Barn.....	11,000.00	9,930.54
1912	Sheep Barns	3,000.00	2,631.50
1912	Brood Mare Barn.....	3,300.00	2,871.60
1912	Tool Shed	1,750.00	1,551.05
1911	Feed Barn	300.00	294.00
1912	Stallion Barn	500.00	490.00
1911	Work Horse Barn	1,500.00	1,267.73
1903	Swine Sheds	2,000.00	1,238.92

Date of Erection (or acquisition)		Original Cost	Estimated Present Value
1916	Soil Bins	9,941.22	9,547.55
1890	Implement Shed	500.00	490.00
1890	Animal Husbandry House.....	1,500.00	1,455.00
1916	Agronomy Barn	3,056.32	2,935.29
1912	Poultry Plant	2,000.00	1,940.00
1917	Cattle Feeding Plant.....	29,625.36	29,625.36
Totals		\$ 600,353.41	\$ 470,116.12
1878	LAW BUILDING	43,001.16	23,038.37
1912	COMMERCE BUILDING	101,326.03	91,646.17
GENERAL UNIVERSITY USE			
1914	Armory	229,119.17	215,643.41
1915	Battery "F" Barn.....	1,721.68	1,687.25
1908	Auditorium	135,787.78	107,096.87
1897	Library	194,739.84	127,156.96
1901	Gymnasium (Men's)	80,554.18	52,556.14
1890	Gymnasium Annex	39,161.11	30,278.46
1905, 1908,			
1912, 1914	Woman's Building	217,232.98	183,400.71
1917	University Isolation Hospital....	16,753.30	15,816.40
1913	1210 Springfield Avenue, Demon- stration Service, etc.	1,437.50	1,282.13
Totals		\$ 916,507.54	\$ 734,918.33
1914	ADMINISTRATION BUILDING	146,118.90	140,332.59
1896	PRESIDENT'S HOUSE (Old).....	15,000.00	5,565.42
1917	PRESIDENT'S HOUSE (Nevada Street)	17,152.25	16,898.57
1917	WOMAN'S RESIDENCE HALL.....	180,247.32	180,247.32
SERVICE BUILDINGS			
1897	Greenhouse	7,800.00	4,898.04
1910	New Power Plant.....	46,780.00	41,470.07
1897, 1902	Old Power Plant.....	20,000.00	12,422.77
1901	Pumping Station	8,000.00	6,233.00
1914	Warehouse	1,990.00	1,872.78
Totals		\$ 84,570.00	\$ 66,896.66
TENANT HOUSES, Urbana-Champaign			
1911-1916			
	806 South Sixth Street.....	2,275.00	2,229.50
	1011 Railroad Street.....	478.93	427.38

Date of Erection (or acquisition)	Original Cost	Estimated Present Value
502 South Goodwin Avenue.....	2,700.00	2,646.00
502½ South Goodwin Avenue.....	2,500.00	2,450.00
504 South Goodwin Avenue.....	1,683.79	1,505.91
506 South Goodwin Avenue.....	1,236.83	1,105.90
504 South Harvey Street.....	288.00	288.00
506 South Harvey Street.....	679.48	606.97
510 South Harvey Street	1,100.00	658.83
1207 West Stoughton Street.....	940.00	940.00
Totals	\$ 13,882.03	\$ 12,858.49
Totals, Urbana	4,228,800.18	3,359,545.72
CHICAGO DEPARTMENTS		
1913 Medical Building	155,000.00	151,900.00
1913 Dental Building	30,000.00	29,400.00
1915 Pharmacy Building	61,022.27	59,801.82
TENANT BUILDINGS, Chicago		
1917 1756-1758 West Polk Street.....	10,248.33	10,248.33
1917 721-725 South Wood Street.....	13,076.67	13,076.67
Totals, Chicago	\$ 269,347.27	\$ 264,426.82
GRAND TOTALS	\$4,498,147.45	\$3,623,972.54

In addition to the buildings actually completed by the summer of 1918, there were various structures upon which work had already been commenced. The following table indicated that the sum of \$253,959.78 had already been spent upon such projects up to June 30, 1918.

INVENTORY OF CONSTRUCTION IN PROGRESS

June 30, 1918¹

Addition to Library.....	\$ 244.27
Athletic Field	61.63
Chemistry Laboratory Addition.....	10,527.18
Clinical Building	514.55
Education Building	127,751.75
Horticulture Field Laboratory.....	2,221.17

¹Cf. Comptroller's Report, Univ. of Ill., 1918, p. 96. Of the buildings listed above, the Education Building, Music Building, and the Artillery Barns have been completed (1920). The total expended at the end of the fiscal year 1919-20 is approximately \$5,000,000

McKinley Hospital	475.60
New Library	819.90
Tina Weedon Smith Memorial Music Hall.....	111,126.16
Natural History Addition.....	217.57
Total	\$253,959.78

Up to the end of the fiscal year 1917-18 approximately \$4,498,-147.45 had been spent for the buildings at present occupied by the University. Of this sum, \$1,153,390, or about 26 per cent was expended for buildings erected during the 37 years from 1867 to 1904, and \$3,344,757.45, or about 74 per cent, for buildings constructed during the fourteen year period from 1904 to 1918.

Of the buildings erected during the past twelve years, six were constructed in 1905, at a total expense of \$187,000, with funds secured in 1903. If this sum is added to the \$1,153,390 spent prior to 1905, the total becomes \$1,340,390 for the first 37 years of the life of the University. But this is offset by the fact that \$500,000 was secured from the Legislature in 1917, to be spent during the biennium beginning July 1, 1917.

It will be observed that during the past sixteen years, sixteen important buildings have been erected. Of this number, three are buildings of general university use, the Auditorium, costing \$136,000; the new Armory, \$230,000; and the Administration building, \$146,000. Two are designed to serve the interests of the Women students—the Woman's building, costing \$217,000, and the Women's Residence Hall erected at a cost of approximately \$180,000. The study of the humanities was first adequately provided for by the erection of Lincoln Hall in 1911, at a cost of \$235,000. The scientific interests of the university were given support in the erection of substantial additions to the Natural History building and the Chemistry laboratory, costing \$165,000 and \$365,000 respectively, and a Vivarium costing \$76,000. To the engineering group there were added a Physics laboratory costing \$220,000; a Transportation building, \$86,000 and a Ceramics laboratory, \$131,000. The agricultural group was enlarged by the erection of many minor buildings and two major structures—a Floriculture, Plant

Breeding, and Vegetable Gardening group of buildings and greenhouses, costing \$88,000, and the Stock Judging Pavilion erected at a cost of \$112,000. The School of Music and the College of Education are greatly strengthened by the addition of the Smith Memorial Music Building and the Education Building respectively.

During this period also the Medical, Dental, and Pharmacy buildings in Chicago were acquired by the University. The value of the Medical and Dental buildings has been estimated conservatively at \$155,000 and \$30,000, respectively. The total cost of the Pharmacy buildings, which were purchased in 1915 and reconstructed to meet the needs of the School of Pharmacy, was approximately \$61,000.

The following pages contain a description⁸ of the principal University buildings erected during the years from 1904 to 1920.

The Agronomy Building (erected 1904-5) is 50 by 100 feet in size, of brick and slate, trimmed with stone. It contains a field laboratory for crop work in which yields of experimental plants are studied, sample seeds stored, and specimens preserved.

The Beef Cattle Building (erected 1904-5) is a one-story structure of brick and slate, trimmed with stone, 217 feet across the front, with a wing at either end 33 by 49 feet; the central portion rises two stories and is used for the storage of feed. Other portions of the building are used as quarters for the breeding herd, and will accommodate about 100 head of cattle.

The Entomology Building (erected 1905) for the use of the State Entomologist and his staff, is a two-story building 48 by 20 feet, with basement storerooms, and with two insectary wings of greenhouse construction, each 25 by 20 feet. It contains the office of horticultural inspection, a stenographer's room, rooms for the assistant inspectors and insectary assistants, and a large fireproof vault. The glass-covered wings are equipped for experimental entomology and life-history studies.

The Horticulture Building (erected 1904-5) is a structure of brick and slate trimmed with stone, approximately 50 by 100 feet in size. It was designed as a field laboratory for horticultural tests, and contains sorting rooms, storage rooms, and a

⁸Cf. Univ. of Ill. Annual Registers, 1913-1917

laboratory for the mixing of spraying materials and other operations in connection with the horticultural work.

The Mechanical Engineering Laboratory (erected 1905) is a brick building with a frontage of 120 feet and a total depth of 182 feet, which during the year 1916-17 was changed in the interior to provide for a basement with an elevated or mezzanine operating floor, giving a floor area for laboratory purposes of 28,000 square feet. On the mezzanine floor is mounted all of the principal equipment in the laboratory; in the basement auxiliary apparatus is housed. The front section is two stories high and together with the two-story addition to the south contains offices, lecture and computation rooms, a lavatory, and an instrument room. The main laboratory is divided into three bays, each approximately 40 feet wide. The middle bay is provided with a ten-ton, three-motor traveling crane, and the north bay with a five-ton hand-operated traveling crane. In the basement two flumes, each three feet deep by four feet wide and 120 feet long, together with a storage reservoir having a capacity of 7,000 gallons, provide for the measurement and storage of water.

The Woman's Building (erected 1905) is in the New England colonial style of architecture, of reddish brown brick, with white stone trimmings. The central part of the structure is the woman's gymnasium. On the lower floor there are the office of the Director of Physical Education for Women, a swimming tank, lockers, dressing rooms and baths. The upper floor is devoted to the main gymnasium, which is 92 by 50 feet. The north wing of the building is given to the department of household science, and the south wing provides rooms for the social life of the women students.

The addition to the Woman's building (erected 1912) is a three-story fireproof building with basement. It is 200 feet long on the front and 83 feet on each connecting wing, having 43,000 square feet of floor area. It has a large colonnade with towers on the front and two smaller colonnades on the north and south of the inner court. The addition is similar to the old building in finish and supplements the working space of the departments using it. It has two halls for literary societies and a modern flat on the upper floor, and an institutional kitchen and large

dining room on the second floor. There are also offices for the Dean of Women and the Director of the Courses in Household Science, laboratories, social rooms, and space for the expansion of gymnasium work.

The Farm Mechanics Building (erected 1906-7) is a three-story brick structure containing class rooms, offices, lecture rooms, drafting room, library, laboratories, and tool and storage rooms. The third floor, which is reached by an elevator, furnishes storage room for the greater part of \$16,000 worth of farm machinery loaned the College by various manufacturing companies and used for laboratory work. The facilities afforded by this building, with its equipment, make possible the assembling, testing and adjusting of all the important machines used in farm operations.

The Auditorium (erected 1907-08) is a brick and stone building for general meeting purposes. It contains an auditorium seating about 2,200 and a memorial vestibule. All general University exercises, including convocations, are held in this building.

The Experimental Dairy Barns (erected 1912-13) comprise a round barn 70 feet in diameter with a reinforced concrete silo in the center, a semi-detached rectangular structure 40 by 70 feet with a Grout silo adjacent, and a small dairy house and shop 26 by 32 feet. The barns are of frame construction of brick walls with solid floors of the mill type of construction and contain feed rooms, hay lofts and other accommodations for the experimental dairy herd. The dairy house is of frame construction, two stories in height, and contains office, shop, coal room, dairy room and four sleeping rooms for employees.

Natural History Hall (old part erected 1892; addition 1909) covers a ground area 135 feet by 275 feet. It is occupied by the departments of botany, entomology, zoology, physiology, geology and mathematics, together with the office and equipment of the State Natural History Survey, and the office of the State Entomologist. A fireproof museum 51 feet by 63 feet in size, equipped with fireproof and dustproof cases, occupies the center of the building.

The Laboratory of Physics (erected 1909) is a three-story fireproof brick building trimmed with Bedford limestone. The length is 178 feet and the depth of the wings is 125 feet. The large lecture room has a seating capacity of two hundred sixty-two. A one-story annex, 78 by 28 feet, contains the ventilating and heating fans and the machine shop of the department. The total available floor area, exclusive of the basement, is about 60,000 square feet. The majority of the large laboratories and the recitation rooms are in the west wing. The east wing is of heavy construction and contains about 30 smaller laboratories for advanced experimental work. The blue print and photographic laboratory of the University occupies rooms on the top floor of the building. Gas, distilled water, compressed air and vacuum, and direct and alternating electric currents of a wide range in amperes and in volts are available in all parts of the building.

The Central Heat and Power Plant (erected 1902; addition 1910) contains boilers aggregating 2,500 horsepower. The two stations furnish steam for heating and power to all buildings on the campus. A power plant containing a 250-kilowatt Allis-Chalmers direct connected steam engine and dynamo, a 125-kilowatt direct connected Westinghouse engine and generator, and a 100-kilowatt Curtiss turbo-generator, together with the accessories necessary to a complete power station, supplies current for light and power to all parts of the grounds. The pipe-lines of the heating system and the circuits for distributing electricity are carried from the central plant to the several buildings through brick and concrete tunnels and clay tile and concrete conduits. Altogether there are now 6,213 feet of tunnels and 9,876 feet of conduit for the distribution of steam and 48,850 feet of single cell telephone and electric conduit. The new boiler and power plant provides temporary quarters for the electric test car of the department of railway engineering.

Lincoln Hall (erected 1911) is four stories in height and has a frontage of 230 feet with two wings running back 127 feet. The exterior is brick, stone and terra cotta. This building provides for the advanced work of the departments of the classics, English, Romance languages, Germanic languages, his-

tory, economics, education, political science, sociology and philosophy. The first three floors provide, in addition to the ordinary class and consultation rooms, seminar libraries and conference rooms. On the fourth floor are research rooms and two museums, the Museum of Classical Art and Archeology and the Museum of European Culture.

The Sheep Barn (erected 1913) is a wooden structure consisting of a main barn 36 by 90 feet, and a shed, opening to the south, 25 by 100 feet in size. A 6-foot aisle, lined by pens on each side, runs through the center of the barn. This building besides accommodating the University flock is used for experimental work. Its location and construction insures dry footing and ample light and ventilation thruout the year.

The Ceramic Engineering Kiln House (erected 1912) connects with the Ceramic Engineering Building. It has a floor area of 11,200 square feet, and contains the kilns, furnaces and heavy machines for working clays.

The Mining Engineering Laboratory (erected 1912) is a one-story building having a floor area of 3,600 square feet. It contains a chemical laboratory for the department of mining engineering, and a Mine Rescue Station equipped and arranged for training men in the methods of mine rescue work.

The Commerce Building (erected 1912) is a fireproof building three stories high, 153 feet on the front and 60 feet deep, with a one-story annex containing a lecture room 48 feet square. The building has a total floor area of about 29,000 square feet and houses the work in business administration with its various class rooms, offices and laboratories. The exterior first story finish is buff Bedford stone; the second and third stories are of brick with carved stone trimmings and cornice. The roof is of tile, and the interior trim is of dark oak.

The Locomotive Testing Laboratory (erected 1912) is a fire-proof building, with brick walls, 117 feet long and 42 feet wide, connected by a spur with the Illinois Traction System tracks. It houses a locomotive testing plant which consists of supporting wheels on which rest the drivers of the locomotive to be tested, a dynamometer to which the locomotive drawbar is attached, and which measures the tractive force exerted by the

locomotive, water brakes for absorbing the power developed by the locomotive, and other auxiliary apparatus. The exhaust gases pass through a "transite" (or asbestos board) duct to a large fan which forces them through a reinforced concrete cinder separator; the separator removes the cinders and discharges the gases into the air thru a brick stack eighty feet in height.

The Transportation Building (erected 1912) is a three-story fireproof building of brick trimmed with stone. The general dimensions of the building are 65 by 189 feet and the total floor area is 34,225 square feet. The first and second floors of the building are occupied by the departments of railway and mining engineering, and the third floor is occupied by the department of general engineering drawing.

The Horticulture Greenhouse Group (erected 1912-13) includes (1) a floricultural group and (2) a vegetable and plant breeding group.

(1) The Floriculture Greenhouse Group (erected 1912-13) consists of a two-story and basement service building 93 by 37 feet, and the following glass structures: four houses each 105 by 28 feet, three houses each 105 by 35 feet, one corridor house 139 by 10 feet, one storage house 50 by 12 feet, and a palm house 80 by 40 feet. The service building is of hollow tile and cement construction, and contains laboratories, lecture room, herbarium room, offices, and seminar room, as well as potting, storage and work rooms.

(2) The Vegetable and Plant Breeding Greenhouse Group (erected 1912-13) consists of a glass house for vegetable growing, 105 by 28 feet, two houses for plant breeding each approximately 80 by 30 feet, a wire house 80 by 30 feet, and a two-story and basement service building 82 by 36 feet, containing laboratories, work rooms, class rooms, offices and storage rooms. The type of construction of this building is the same as that of the floriculture service building.

The Stock Pavilion (erected 1913) is a fireproof building 54 feet high on the front and 148 feet deep with circular ends 92 feet in diameter and 20 feet high. The total ground area is 30,000 square feet, and the show arena is 216 feet long and 65 feet wide. Seats of concrete provide accommodations for 2,000.

Arrangements are to be made providing for a division of the arena into three parts giving three separate judging rooms for instructional purposes. The building also contains class rooms and offices. Stabling will be provided in a separate structure. The exterior is of brick and terra cotta, renaissance in design, the frieze being enriched with medallions of animal heads.

The College of Medicine Building (acquired in 1913) in which are housed all the departments except that of anatomy, is a brick and stone structure two hundred feet long by one hundred and ten feet deep and five stories high, fronting on three streets. The building contains three lecture rooms with a seating capacity of two hundred each; a clinical amphitheater with a seating capacity of over three hundred; an assembly hall with a seating capacity of seven hundred; besides recitation rooms. It also contains laboratories for physiology, chemistry, materia medica, therapeutics, and microscopical and chemical diagnosis, each accommodating from fifty to one hundred students at a time.

A three-story annex to the main building contains the laboratories used by the departments of pathology, bacteriology and chemistry. All of these laboratories have outside light and are furnished with work tables, desks, lockers and the necessary apparatus. There is a supply of microscopes, lenses and oil immersions and a projection apparatus for the illustration of lectures by means of stereoptican views.

The College of Dentistry is housed in a six-story building, (acquired in 1913) containing three amphitheatres, recitation rooms and lecture rooms, laboratories, dissecting rooms, a clinical operating room and an infirmary. A parlor is provided for the use of the women students. The building adjoins that of the College of Medicine.

The New Armory (erected 1914-15) comprises a drill room with a clear area 200 by 400 feet and a height of 98 feet at the center, the roof being carried by fourteen three-hinged arches. The sides are of hollow tile, and the ends, supported by columns, are of steel, glass, tile and concrete, with wood frame and sashes. The drill floor is of sufficient area to permit the maneuvering of an entire battalion of the cadet regiment. Provision has been

made for the addition of a balcony around the drill floor with seats for 3,000 and for the addition of three story facades along the sides, flanked by towers at each end. This will provide space for company rooms, locker rooms, shooting tubes and class rooms.

The Isolation Hospital (erected 1908, reconstructed 1914 and 1917) has been used for its present purpose since 1914. It is a substantial one-story stucco building 27 feet by 103. The basement as reconstructed, contains a supply room, laboratory and a complete disinfecting suite, consisting of a formaldehyde room, a septic room, a sterilizing room, and a physicians' wash room, locker room and sterile room. The first floor is divided into three wards entirely unconnected with one another. Each ward has a capacity for seven beds. In connection with each ward is a nurse's room with bath, a diet kitchen, a linen closet, and a bath room. Opening from each ward is a private room for use as an observation room or for serious cases. The building is provided with all necessary sterilizing and antiseptic devices in connection with the wards, in addition to the equipment in the basement.

The Administration Building (erected 1914-15) is a three-story and basement fireproof building of brick and stone. It is 153 feet long and 66½ feet deep with a one-story annex, 48 feet by 42 feet, with a total floor area of 36,000 square feet. It contains the rooms of the Board of Trustees and the offices of the President, the Registrar, the Comptroller, the Secretary, the Supervising Architect, the Dean of Men, the High School Visitor, the Adviser to Foreign Students, the Alumni Association, the University Press, and the Information and Stenographic Bureau. This building is the second unit of the Commerce Building, and will eventually be occupied by that College.

The Chemistry Laboratory (original structure erected 1901-2; addition 1914-15) is a brick building. The original structure is of slow burning construction, and the addition, which will have five stories available, fireproof. The total available floor area is about 164,000 square feet. The ground plan is a hollow square, the extreme dimensions of which are 230 feet along the front, and 200 feet along the sides. The center court contains the lecture amphitheatre, which seats 390. The side

wings of the building contain the general student laboratories, while the center portions of both old and new structures are occupied by offices, class and seminar rooms, library, museums, supply rooms, and graduate research laboratories. The main store room is in the basement under the lecture room. In this building are located also the offices and laboratories of the State Water Survey and the department of bacteriology.

The Botany Annex (erected 1914) is a greenhouse laboratory covering 5,000 square feet, divided into compartments that are severally provided with devices for controlling humidity and temperature within close limits for exact experimentation in the fields of plant physiology and pathology. To this laboratory is attached a reconstructed two-story dwelling, giving working and class rooms for use in connection with the experiments conducted under glass.

Pharmacy Buildings.—In December, 1915, the University purchased for the School the property located at the corner of Wood and Flournoy Streets and comprising eight city lots with two large brick buildings, connected by a fireproof central stairway tower. The new quarters were occupied in June, 1916.

The Ceramic Engineering Building (erected 1915-16) is a three-story structure, 188 by 65 feet, of fireproof construction, built of texture brick and polychrome terra cotta. The front of the building is decorated with colored tile panels. The roof is of Spanish tile, and the floor of the halls and the corridors of clay tile. The structure is intended to present modern achievement in the use of ceramic structural materials. The third floor is occupied by the State Geological Survey and about one-third of the first floor by the department of applied mechanics. The main portion of the building is utilized by the recitation rooms, laboratories, and offices of the department of ceramic engineering.

The Vivarium (erected 1915-16) occupies the block south of the Illinois Traction System tracks, between Wright and Sixth Streets, the main facade of the building being toward Healy Street. The scheme involves a main building containing eight laboratories, one office, and store rooms, with supplementary greenhouses at each end, and a head house serving two greenhouses together with two screened houses. The main build-

ing is a brick structure, two stories high, connected to the head house by a one story passage from the main corridor. The building is occupied by the departments of zoology and entomology.

The Genetics Building (erected 1915-16) is a one-story brick structure (located on Farm Lane and Mathews Avenue) housing the laboratories, offices and animal rooms of the genetics department of the Agricultural College. The work carried on in this building is done principally by graduate students.

The Cattle Feeding Plant (erected 1917) is of brick and wood construction, located on the axis of Fourth Street, south of the "Farm Lane." The lower part is a fireproof structure, 300 feet long, open to the south. The feeding lots are paved with brick and extend out some 30 feet from the building line. The plant is used as a storage place for feed for the animal husbandry department, and the upper stories are constructed as an elevator with large grain bins, where several tons of grain can be elevated, preparatory to grinding, shipping, or feeding. In connection with the plant is a corn crib of the capacity of 12,000 bushels. The four silos to the north are 16 by 70 feet and open into the feed room of the plant. They are of three different materials: tile, concrete, and brick.

The President's House (acquired in 1917) is located at 1103 West Nevada Street, Urbana. It is a two-story stucco building in the modern English style. It contains the usual living and service rooms of a ten-room house, and is featured by a large living-porch opening into an old fashioned trellis-walled garden.

The Women's Residence Hall (erected 1917) is located on Nevada Street north of and adjacent to the new athletic field for women.

It is a three-story fireproof building of colonial design, with a total frontage of 167 feet and two wings running back 101 feet. It will accommodate 98 girls. There are both double and single rooms, a suite for the matron, an emergency hospital, and rooms for servants.

The basement contains the kitchen and two large dining rooms. There are also locker and shower accommodations in the basement for non-resident girls who use the adjacent athletic field.

In the center of the first floor there is a large living room with adjoining parlors. The wings on each side of the first floor are at a higher line and are occupied by student rooms. There is a large sleeping porch at the south end of each wing on each floor.

The ground plan is a U, with the opening toward the south. In the enclosure there is a sunken garden.

The Education Building, finished in 1919, is located on the block bounded by Mathews, Springfield, and Goodwin Avenues and Stoughton Street, in Urbana. The portion first erected of the group is 180 feet long and 56 feet wide, without the bays, and will front on Mathews Avenue. It is three stories high above grade and of fireproof construction. The exterior is of Bedford limestone of collegiate Gothic design.

The building is intended to perform the functions of a model high school building for 200 pupils. The plans provide for five standard class rooms, rooms for manual training and for commercial branches and chemistry, physics and other science laboratories. There are also two small lecture rooms, thirteen recitation rooms, a library, several conference rooms and the faculty offices.

The east member of the group will be of the same size and shape as the member recently constructed. The center structure will measure 125 feet from east to west and 85 feet from north to south and will be connected with the east and west members by towers.

The Tina Weedon Smith Memorial Music Building (completed 1920) is of fireproof construction, with the public part of the interior richly detailed in the style of the Italian Renaissance. The entrance vestibule and foyer form a part of the corridor system, permitting entrances and exits on three sides of the Recital Hall, which has a seating capacity of six hundred and fifty persons on the main floor, and four hundred and fifty in the balcony. This room is designed acoustically so as to have a period of reverberation of 1.75 seconds when fully occupied. Provision has also been made for reducing the period of reverberation when there is no audience. On the second floor is the balcony with its foyer and a memorial room,

housing the portraits of Captain Thomas J. Smith of Champaign, whose generous donation to the building fund made so beautiful a building possible, and his wife, to whom the building is dedicated.

The working quarters for the School of Music comprise on the first floor a suite for the Director, seven studios, and two class rooms, and on the second floor eleven studios and a large library. In the attic, the balcony exits open directly into the stair halls on either side, and there are in addition, forty-nine practise rooms and a lecture room seating about one hundred. The estimated cost of the building is \$450,000.

The Artillery Barns were constructed in 1919-20 to provide for horses sent to the University by the Federal Government in connection with the instruction in Military Science. A special State appropriation of \$25,000 was made in 1919 to construct these barns.

FURNITURE, FIXTURES AND EQUIPMENT

In the two tables which follow, a statement is presented of the value of the furniture and fixtures, and of the departmental equipment owned by the University in 1904 and in 1917.

INVENTORY OF FURNITURE AND FIXTURES AT JUNE 30, 1904 AND AT JUNE 30, 1918

	¹ 1904	² 1918
Liberal Arts and Sciences Group.....	\$27,022.95	\$ 99,882.21
Engineering Group	15,028.65	68,503.96
Agricultural Group	77.80	48,971.27
Law Building	2,785.65	9,790.59
Commerce Building		9,241.26
General and Miscellaneous.....	24,032.10	55,587.90
Administration		15,569.97
Medical and Dental Buildings.....	8,181.87	27,452.30
Pharmacy Buildings	4,213.53	3,441.99
Totals	\$81,342.55	\$338,441.45

¹Cf. Rept., Univ. of Ill., 1906, p. 36.

²Cf. Comptroller's Report, Univ. of Ill., 1918, p. 97, ff.



Botany Annex



Floriculture and Horticulture Greenhouses



Vivarium



Genetics Laboratory



State Entomologists Office

INVENTORY OF DEPARTMENTAL EQUIPMENT AT JUNE 30, 1904
AND AT JUNE 30, 1918

	¹ 1904	² 1918
Administrative Offices		\$ 7,917.42
College of Liberal Arts and Sciences.		
General Office	\$ 188.50	445.45
Art and Design.....	4,508.12	3,152.92
Astronomy	9,267.00	14,727.64
Bacteriology		6,403.97
Botany	6,746.80	22,064.89
Chemistry	15,030.28	55,931.26
Classics	417.08	1,432.59
Education	26.20	2,504.93
English	30.00	2,034.42
Entomology		8,367.02
Geology	20,597.42	19,157.74
Germanic Languages	14.00	869.43
History	97.90	1,184.38
Mathematics	332.33	3,100.98
Philosophy		107.98
Physiology	4,764.98	3,309.56
Political Science	46.75	20.00
Psychology	1,350.78	10,812.23
Romance Languages	12.00	419.85
Sociology		747.91
Zoology	6,479.45	21,558.12
Classical Museum	2,839.37	11,143.20
Museum of European Culture.....		11,132.56
Museum of Natural History.....	10,000.00	10,429.95
Oriental Museum		3,185.00
Totals, Liberal Arts and Sciences.....	\$ 82,748.96	\$ 214,243.98
College of Agriculture and Agricultural Ex- periment Station	60,425.37	291,948.69
College of Engineering and Engineering Ex- periment Station		
General Office	1,724.94	2,434.93
Architecture	5,558.18	8,003.82
Ceramic Engineering		18,580.49
Civil Engineering	8,110.00	21,941.20
Electrical Engineering	17,959.03	68,022.99
General Engineering Drawing.....		1,082.19
Mechanical Engineering	31,358.72	75,318.70

¹Cf. Rept., Univ. of Ill., 1904, p. 35²Cf. Comptroller's Report, Univ. of Ill., 1918, p. 98

Mining Engineering		25,307.98
Municipal and Sanitary Engineering and Theoretical and Applied Mechanics...	9,902.60	55,087.60
Physics	19,777.55	80,531.23
Railway Engineering		69,072.31
Totals, Engineering.....	\$ 94,391.02	\$ 425,383.44
Colleges of Medicine and Dentistry.....	17,956.24	141,039.94
School of Pharmacy.....	8,182.60	13,821.11
College of Commerce and Business Adminis- tration	¹ 153.42	4,241.03
College of Law.....		222.75
School of Library Science.....	250.00	569.40
School of Music.....	2,568.30	4,525.67
Graduate School		576.24
Academy	776.51	
Illinois Historical Survey.....		530.95
General Departments		
Library	103,970.47	659,225.31
Physical Education for Men.....	2,250.25	4,155.09
Physical Education for Women.....	558.95	2,022.14
Military	23,640.62	⁴ 14,282.01
Military Band	439.50	10,097.43
Health Service		846.44
Other Departments	63.00	25,585.44
Totals, General Departments.....	\$130,922.79	\$ 716,213.86
Physical Plant (Urbana).....	88,741.95	159,237.82
TOTALS FOR UNIVERSITY.....	\$487,117.16	⁵ \$1,972,554.88

Although the distinction between equipment, on one hand, and furniture and fixtures, on the other was made less exactly in 1904 than in 1918, the comparison indicated in the foregoing tables represents with reasonable accuracy the increase in the value of these items during the last fourteen years.

For the University as a whole the value of furniture and fixtures rose from \$81,342.55 in 1904 to \$338,441.45 in 1918—a gain of \$257,098.90 or over 310 per cent. Of the Colleges, Agriculture shows the most remarkable increase, having furniture

¹Department of Economics only

⁴Includes equipment loaned by U. S. Government valued at \$10,112.65.

⁵The total on June 30, 1919, was \$2,402,108.64

and fixtures valued at \$48,971.27 in 1918 as against only \$77.80 in 1904.

The total value of departmental equipment, exclusive of departmental furniture and fixtures, was \$487,117.16 in 1904, and \$1,972,554.88 in 1918. This indicates a gain of \$1,485,437.72 or nearly 305 per cent for the period. Of the various divisions of the University, the College of Agriculture, the Colleges of Medicine and Dentistry, the Library, the Military Band; the department of Theoretical and Applied Mechanics of the College of Engineering, and the departments of Education, English, Germanic Languages, History, Mathematics, Psychology and Romance Languages, of the College of Liberal Arts and Sciences, all show an increase considerably above the general average for the University. Of the divisions for which no departmental equipment was reported in 1904, the College of Commerce and Business Administration; the departments of Ceramic, Mining and Railway Engineering; and the departments of Bacteriology, Entomology and Sociology of the College of Liberal Arts and Sciences, are shown to have acquired the largest amount of equipment during the period.

CHAPTER IV

LIBRARIES AND MUSEUMS

The importance to a university of adequate library and museum facilities can scarcely be overestimated. Unless a university is willing to cut loose from the past with its accumulated knowledge, and from the outside world of the present day with its incredibly rapid progress in the fields of science and industry, means must be provided for making a knowledge of the activities of other men readily accessible to the investigator, be he student or professor.

Apparently in the early years of the University the necessity of providing for the ordinary maintenance of the various departments, and later, for additional land and buildings urgently needed, as well, seemed to the trustees to preclude the possibility of making material annual additions to the University library or museums. As a result the University of Illinois was soon outstript in this respect by its sister institutions of learning, and it is only by following a policy within recent years of making annual appropriations of considerable size for these purposes, that the University is beginning to make a respectable showing in this essential form of equipment of an institution of learning.

“Among all the institutes or departments of a university, none is of more fundamental necessity than the university library. No scientific work can be done nowadays of any real value, aside from those extraordinary cases of genius which occur now and then in human history and which seem to be independent of all conditions and exceptions to all rules, without the aid of an adequate library.

“The library, of course, contains the result of the experience of the human race up to the present time. It is of value from various points of view. First of all, it saves time, inasmuch as men need not undertake to do again scientific work which has already been done. It provides the assistance which a scientific man needs by putting at his disposition the results of all

previous work which bears upon his immediate problem, and without which he could not undertake to solve it. It acts further as a great stimulus to scientific work on the part of the members of an instructional staff, and on the part of the student body of the University. So important is this influence that it has been said that a great library will under favorable conditions become a great university. Books are not dead. They are alive to the man who comes in contact with them and knows how to use them. They are the sources of inspiration and power, and not merely of knowledge.

"It is safe to say that the University of Illinois Library is most inadequate for the purposes which a university library ought to serve. No man in our faculty can today carry on a scientific investigation in any line without running up very soon against an absolutely impenetrable stone wall, because he has not access to the entire experience of the race and he is therefore groping blindly in whatever he is attempting to do; duplicating work which other men have done; attempting to do things which other men have demonstrated to be impossible; experimenting without the advantage of the experience of the men who have gone before him.

"The people of this State, whether for weal or woe, located the University of Illinois in a village 125 miles from any important collection of books. Speaking generally, therefore, the library which is to quicken and stimulate and fructify scholarship and investigation at the University of Illinois must be a library located upon the campus of the University.

"We need, therefore, a much larger collection of books, other things being equal, than does the University of Chicago, or Harvard, or Yale, or Columbia, or Pennsylvania, all of which institutions are located within easy reach of collections which in the aggregate are two or three or four times their own collections.

"The following list gives the number of volumes in twelve libraries of the universities of this country:

Name	Number of volumes in library.	Number of volumes in other available libraries in the neighborhood.	Cost of Library Building.
1 Harvard.....	882,104	1,830,000	.....
2 Yale.....	600,000	109,000	\$ 550,000.00
3 Columbia.....	450,000	3,230,000	1,100,000.00
4 Cornell.....	395,209	30,000	260,000.00
5 Wisconsin.....	384,000	82,000	610,000.00
6 Chicago.....	357,411	1,393,000	(?) 1,000,000.00
7 Pennsylvania.....	334,400	1,359,000	.....
8 Princeton.....	372,300	5,000	800,000.00
9 Michigan.....	270,998	8,000	.....
10 California.....	210,000	37,000	.....
11 Brown.....	191,000	338,000	.....
12 Illinois.....	188,000	34,000	160,000.00

“Harvard University has access to additional collections amounting to more than two millions of volumes. The New York collections of four millions of volumes are accessible to Yale within a two hours’ ride. Pennsylvania has, of course, Johns Hopkins and Washington on one side, Princeton and New York on the other, within easy reach: while Princeton has Philadelphia on one hand and New York on the other.

“It will be seen that the collections of the University of Illinois are very far inferior to those of Harvard and Yale and Columbia and Chicago, although all these institutions are located in the midst of a very hotbed, so to speak, of other library collections. It will also be seen that the University of Illinois is inferior in actual number of books, to Cornell and Michigan and Wisconsin, though Michigan does not have an agricultural school in connection with it, and therefore does not need the great segment of a university library represented by the agricultural literature of the world.

“It is plain that the University of Illinois cannot hope to take its place among the great institutions of the world as a real center of learning and investigation until it has much larger library facilities.

“The University should look forward to the accumulation of a collection of at least a million of books as rapidly as is at

all possible and at all consistent with due regard for other interests. Roughly speaking, it will take about \$1,000,000.00 to house a million books; and either in the form of a new library building which might be put up in four \$250,000.00 sections, or in the form of an addition to and an enlargement of the present library building, at a somewhat similar expense, we must make provision for such collection.

“Speaking from an experience of eight years as your executive officer, I think I may say that I have had more people whom I have approached to consider positions at the University of Illinois decline the proposition because of the lack of library facilities than for any other reason; even more than because of the inadequate salaries which we offer for many of our positions as compared with the salaries which other institutions offer for similar positions.

“I have asked the University librarian, in consultation with the Senate committee on the library, to prepare a statement showing the maximum sum of money which year in and year out can wisely be devoted by the University of Illinois to the purchase of books and the cataloging of the same. In view of this fundamental need of all departments alike, I think the trustees should accept this figure, after it has been properly checked up and tested, as the sum which the University ought to ask for in the form of a specific appropriation for the purchase of books in the permanent budget of the University, until our collection numbers at least one million volumes.

“No one who has not actually attempted to answer the numerous questions arising in every library and seminary room, as to what is known about this, that or the other subject, can have any conception of how inadequate our facilities are. To give a slight instance of the imperative need of this material on the one hand and the absolute inability of the University to provide it on the other, I may say that the Governor of the State telegraphed to me one day saying that a bill had been passed by the Legislature and submitted to him for approval or for veto, providing that the milk which was shipped into cities of a certain size in this State should be limited to that which was obtained from tuberculin tested cows. He desired to know first

what similar laws existed in this and other states and this and other countries. He desired to know further what the experience had been where similar attempts had been made. I found on inquiry that our University Library could not answer any of these questions involved in these simple and yet fundamental inquiries. There was no collection of the laws relating to the regulation of the milk industry either in this country or abroad. There was no way of finding out where this kind of experiment had been tried in this country or abroad, or how it had worked out.

“One of the fundamental distinctions between our American universities as a whole and European universities, is to be found in this matter of library facilities, and I believe that one of the reasons why American scholarship has limped along at such a distance behind European scholarship is to be found in the lack of such inspiration and the lack of such assistance as are afforded by great collections of books, which contain in themselves the recorded experience of the human race.”¹

PROGRESS FROM 1904 TO 1918

That the efforts made during the last decade or more to increase the library facilities of the University have resulted in substantial additions to the number of volumes owned, is indicated by the fact that whereas there were but 66,239 books on the shelves of the Library in 1904, the number had risen by June 30, 1918, to 387,999 volumes,²—an increase of over 485 per cent for the fourteen year period. A very complete account of the development of the Library during this period is given in the following statement by Mr. F. K. W. Drury, Assistant Librarian of the University:³

A “third of a million volumes” sounds like a considerable number of items. They take considerable shelf room—seven

¹A memorandum on the needs of the Library presented to the Board of Trustees by the President of the University at a meeting held June 7, 1912.—Rept., Univ. of Ill., 1912, p. 595.

²Does not include the 22,576 volumes in the libraries of the Chicago Departments.

³A revision by Mr. Drury, for this report, of an article contributed by him to the *Alumni Quarterly* in April, 1915.

miles or so—and 600,000 cards to index them. But when the wide range of subjects is considered and the varied lines of instruction and research are divided into this collection, each department seems to have only begun to collect the material which it needs. The library dwarfs by reason of the vastness of its field.

All of agriculture, all of engineering, all of science and useful arts (except medicine, dentistry and pharmacy, which have a separate library of 22,576 volumes in Chicago), all of the literature and the humanities, all human knowledge in fact, save theology, must be represented in this library.

This is a broad field to cover. Specialization and concentration in thirty-five or fifty subjects makes a large collection necessary. Nor will it do to compare Illinois with institutions which have no colleges of agriculture or engineering.

Neither has Illinois a group of large libraries close at hand upon whose resources the investigator may draw, as is the case with Chicago, Columbia, Harvard, Pennsylvania and others in or near large cities. Because of this wide range of interests and its isolation, the 387,999 volumes now at Illinois do not compare favorably with the equipment of other institutions nor with that needed for efficient instruction and research such as is expected of an institution offering much graduate work.

The Library was established at the very beginning of the institution. In 1867 the trustees bought 644 volumes with \$1000 appropriated for that purpose, and so important did this purchase seem that Regent Gregory made personal selection of them. But the Library's marked growth has been only during the last seventeen years. Until 1897 no amount appropriated for books was higher than \$1500 per annum. With the new building then erected the annual appropriation was made \$10,000 and this has been enlarged year by year through \$20,000 and \$25,000 appropriations until the serious and determined effort of the administration to make this an important library has considerably increased that amount. The result has been a rapid increase in the size of the Library. Numbering 70,000 volumes in 1904, in 1918 this has been increased fivefold; to be exact, to 387,999 volumes on June 30, 1918. The sums actually ex-

pended for books during the last six years have been approximately as follows:

1912-13.....\$46,000	1915-16.....\$76,000
1913-14..... 96,000	1916-17..... 85,000
1914-15..... 58,000	1917-18..... 69,000

An important phase of this increase is not alone in the acquisition of books by purchase, but also in the development of a department of exchanges and gifts. A special assistant was appointed in 1907 to arrange for exchanges with learned societies and other institutions. The marked result was to increase the number of exchange items received from 41 in 1907 to 405 in 1908 after one year of work; to 1,478 in 1914, and to 2,441 in 1915. But, owing to the war, the number of volumes added by exchange fell to 767 in 1916, 311 in 1918, and an important item here has been the exchange of doctor's dissertations, which in the case of German universities has brought great returns. Gifts likewise have increased through the systematic activity by the same department from 1500 in 1907 to 5300 in 1914. In 1917-18 the number was 3,322.

Illinois has had no accumulation of past ages, few gifts of worthless or undesirable material, and, of course, has bought only the books that have been absolutely needed. Consequently its stock is alive and up to date; often indeed the historical aspects of a subject have been neglected while its technical and practical sides have been developed. Only time and continued active purchase can remedy such defects.

The manner of the rather uneven growth of the Library can be easily understood when it is known that each department has had the selection of the books in its own subject. Limited funds have caused limited purchasing, and the books bought have been along the line of the study and research pursued by each department. Unequal development has resulted, but Illinois has a practical working library bought with the needs of the departments in mind.

Since the Graduate School was reorganized in 1906, a special effort has been made to develop certain fields for broad research, and appropriate library purchases have been encouraged by the administration. As a consequence of the use of Graduate School

funds, a secondary method of development has been used which supplements the departmental method. Special appropriations have been made for purchases which cut across the main stream. Thus an appropriation for strengthening the library collection of biographies was supplementary to all departmental growth.

With the building of Lincoln Hall in 1909, a new feature was developed which has given a marked impetus to the growth of special departments and subjects: the seminar and department library and librarian. In this building are housed six collections, selected from the general library, each in charge of a librarian trained in the special subject. At present these branch libraries contain deposits as follows: Education, philosophy and psychology, 15,500 volumes; classics, 23,000 volumes; modern languages, 27,000 volumes; English, 16,400 volumes; history and political science, 20,000 volumes; economics and sociology, 24,000 volumes. As might be expected, these departmental libraries, and the others on the campus, like architecture, chemistry and so on, which have a librarian in charge who is also a trained bibliographer, have been making noticeable progress in building up collections and in starting to round out the libraries in these subjects.

The architectural library reflects the personality of Professor N. C. Ricker, after whom it was formally named in January, 1917. Thruout the years by careful selection and buying, he has built up a fine working library of 4700 volumes, strong in general architecture and construction, as might be expected from the man, but well developed also in history, decoration and ornament, and painting and sculpture. Mathematics has similarly been developed by successive members of the faculty, till the 5610 volumes cover all the main journals and a good proportion of the literature. Law has its separate library, with 22,000 volumes. Here will be found the reports of last resort of all the states, statutes and session laws of all the states, all reports of the appellate courts, all the published case law of the United States, all the Canadian reports except Quebec and practically complete sets of the English and Irish reports. There is also a good collection of legal treatises, digests and citations.

Chemistry, with 10,500 volumes of standard works and sets of periodicals, has been developed in all fields—organic and in-

organic, analytical, physical, industrial and physiological. The departments of botany, geology and zoology have combined with the State Laboratory of Natural History to form one central library in these subjects. The State Laboratory is especially strong in entomology, with much attention given to fresh water animals and oligochaetes. In this Zoology has also aided, though devoting itself mainly to the purchasing of the sets and journals which are so necessary. Geology has developed a good collection of local paleontology. Botany has featured the morphologic, pathologic and physiologic sides, rather to the neglect of systematic botany, which has however received attention since the coming of Professor William Trelease in 1913, over \$3,000 having been spent in this field. Physics, and railway and mining engineering, have selected libraries of 5,000 and 4,000 volumes, respectively. Library science, with 3,000 volumes, strengthened in 1905 with the Dziatzko⁴ library of 500 items in library economy and paleography, features also its collection of library reports and bulletins.

In 1915 a special reading room for the College of Agriculture, with a librarian in charge, was opened, and here have been centered the varied interests of that college, making it more than a reading room—in fact a real departmental library, with 9,000 volumes.

In 1916 a similar reading room was opened for the College of Engineering, and it is rapidly developing into a departmental library for the departments which have no special seminar collection. There are now 5,000 volumes.

The erection of the Commerce Building in 1912 resulted in the establishment of a special reading room in that building for students in the College of Commerce and Business Administration, in addition to the departmental libraries of Economics and Political Science located in Lincoln Hall. The Commerce reading room contains at the present time about 2,000 volumes.

Just as these branch libraries have divided into special groups, so the books ordered have been selected by the various departments of instruction. Being thus roughly classified by subject, it has been possible in placing the orders to select dealers who

⁴Karl Dziatzko, librarian of Göttingen University

have specialized in certain subjects, such as mathematics, natural science, philosophy, etc. Such special dealers have helped greatly in securing out-of-print books which are so essential in rounding out the literature of a subject. Of course, books have been bought in every sort of way as best they might be secured: through book stores, library agents, second-hand dealers, direct with publishers, and so on. Large selections have been made from catalogs of second-hand books, and frequently a successful long-distance bid at a New York or Boston auction will add a prize to the library.

The book trade has been interrupted during the war, in common with all other business, but it is only with Germany and Austria that there has been anything more serious than mere delay. For a time it was possible to obtain books and periodicals from these countries by mail, after freight and express shipments had been stopped. But all imports from Germany and its allies have ceased since May, 1916. Numerous periodicals in all countries, however, have kept up regular publication but often in a greatly reduced size for each issue. The English trade has suffered the least and shipments both by freight and mail have been about normal.

An outstanding feature of the library as a whole is its collection of serials, covering not only periodicals, but annuals and reports. In 1911 a list of these was printed which ran to over 7,000 titles. This material is the result of systematic effort covering a period of ten years made in the sound belief that no important research in a subject can be carried on without access to its development as recorded in the accepted means of communication among scholars. It was in 1903 that the first money was definitely assigned for the purchase of "sets," and these form a very significant part of the Library.

The general Library has also featured its reference and bibliographical work, with the result of maintaining a working collection of the important tools in these two allied lines.

The purchase of the Dittenberger⁵ library in 1907 and the Vahlen⁶ library in 1913, together with 13,250 dissertations

⁵Wilhelm Dittenberger, professor of classical philology in Halle University

⁶Johannes Vahlen, professor in Berlin University

bought in 1914, has made the Classics library one of the best working classical libraries in the Middle West. It is especially strong in epigraphy, history and grammar, in editions of Greek and Latin authors, and in sets of classical journals.

The Economics library has been built up along the lines of economics theory, history, labor, socialism, money and banking, public finance, commerce, transportation and insurance. Its strength is shown in that it was selected as one of fourteen libraries to be represented in a check list on the economics of railway transportation. Municipal documents have been collected with much energy and care. They comprise charters, council proceedings, ordinances and reports of all important cities in the United States and in foreign countries, as well as city journals, and the publications of municipal leagues and civic clubs. The items run to over 3,000 titles.

In addition to this, the Political Science Department has developed a collection of the proceedings of constitutional conventions which is of more than ordinary importance. The library also has important collections of the United States government documents, the British "blue books," the German Reichstag proceedings, the Spanish parliamentary papers and other official documents.

A foundation of the development of an educational library was laid when the Aron⁷ library, containing 5,000 volumes and 10,000 pamphlets, was purchased in 1913. Features of this collection are the original and early editions of Comenius, and the fundamental treatises of Pestalozzi and Froebel.

German language and literature was strengthened in 1908 by the gift of the Karsten⁸ library and in 1909 by the purchase of the Heyne⁹ library; while the romance languages were bolstered in 1912 by the purchase of the Gröber¹⁰ library. On the basis of these collections there is opportunity for work and study in philology and linguistics, which has been further enriched by the purchase of several hundred dictionaries of all languages, and special treatises.

⁷Dr. R. Aron, professor in Berlin University

⁸Gustav E. Karsten, professor in the Univ. of Ill.

⁹Mortiz Heyne, professor in Gottingen University

¹⁰Gustav Gröber, professor in Strassburg University

A few representative groups in the Modern Languages are the nineteenth century German authors, the mystics typified by Jakob Boehme, and the medieval French epic. Nevertheless, only a beginning has been made in supplying the works in the German and French literatures themselves, while in the collection of the allied languages of Spanish, Italian and Scandinavian the first move was authorized but a few years ago.

English literature covers a wide field, from the old English authors to those of the twentieth century. Concentration has been possible on the seventeenth and eighteenth century periodicals of which there are the original issues of the *Spectator*, the *Tatler* and the *London Gazette* from 1665 to 1700; on English fiction prior to Sir Walter Scott; on Elizabethan and post-restoration drama; and on folk-lore.

History also has an extensive field with just a few periods represented to a reasonable degree, such as Prussian history. The systematic buying of serials has given this library a gratifying proportion of the 2,000 in European history mentioned in the Richardson check list issued by the American historical association. The possession of such sets as the *Monumenta Germaniae Historica* and the publications of the Russian and French historical societies indicates some of the source material in continental history.

For English and medieval history, sources have also been sought, such as the parliamentary journals and debates, the papers or "blue books" already mentioned, the various "Rolls series," and the many publishing societies, as the Camden, the Selden, the Surtees.

American history has been developed naturally for the West and Illinois, until there is now a representative collection of early western travel and rare eighteenth century items, including copies of manuscripts and original maps. Colonial history also has not been neglected. The purchase of the library of H. A. Rattermann of Cincinnati in 1915 gave to the Library an important collection on the German-Americans of North and South America and on the influence of German culture in the New World.

Recent purchases in Latin American history have secured many standard legislative sets, and this large and important

field in history and economics is being gleaned by systematic buying. Professor W. S. Robertson returned in the summer of 1917 from a year's tour of the South American republics, where he purchased for the Library sets and books to a value of \$5,000. In addition he effected many important exchanges.

In agricultural literature, the Library has made a good start in collecting serials and reports, as well as in featuring the publications of the agricultural experiment stations, and the herd, flock and stud registers of pedigreed stock. With the opening of an agricultural reading room in 1913 a systematic growth may be expected in all these subjects. So far especial attention has been given to the study of soils, animal nutrition, landscape gardening and horticulture.

Music and art are represented by works on the technique of the subjects—such books as would help in the actual instruction. At the present time a library of organ music is being collected.

Mention should be made also of the collection of a representative file of newspapers. Back files such as the London Times, 1833 to date, and the New York Tribune from the beginning, are only part of a series starting with the first newspapers and forming a chronological conspectus which presents a copy of a newspaper for each year since that early date, save only a few years in the early eighteenth century.

The collection of the publications of other colleges and universities is also very representative and of great use and interest. Incunabula are very sparsely represented, and their presence being due more to accident in being found in the libraries bought than to any intent in purchasing them. Maps are also receiving attention after long neglect, and with special facilities for storing them, the library desires to obtain large numbers. Of interest in the present collection are the maps showing the explorations in the great northwest territory in the eighteenth century.

Various outside agencies are helping the library to develop. The Order of B'nai B'rith has contributed money for the purchase of books of Jewish interest. The Irish and Celtic societies are interesting themselves in the study of Irish. The School



Physics Laboratory



Ceramics Building



Transportation Building and Mining Laboratory

of Military Aeronautics located here in 1917 has caused a noticeable purchase of books of flying and aircraft. Books on all phases of the World War have been gathered from all sources. The recent appointment of a professor of Oriental languages, literatures and archeology has resulted in a notable increase of books on these special subjects, while for the past two years the literature of Italy has been developed thru the appointment of a head of the Department of Romance Languages whose chief work has been in the field of Italian language and literature.

From all this it is evident that there has been built a story or two of a well rounded scholarly library structure. The foundation has been laid upon which such a library can be erected. Even a half million volumes will not give a necessary equipment.

A university is not rated as such by the size and number of its buildings, nor by the charter-given privilege of granting advanced degrees, nor by the range of its instruction, be it from Babylonian inscriptions to the virus of smallpox. A university is judged by the completeness of its equipment of laboratory, library and learned men.

The field of absolute knowledge may well fall within the range of the college. The university accepts this and works from known facts to unknown facts; until these new facts are either justified or denied by investigation and research.

The investigator must first of all plow his way through the present knowledge of his special subject, must orientate himself, and noting its trends and tendencies, must progress to the end he aims at. His tools for all this must be in the library, as it is through books, journals, digests, reports, bulletins, etc., that he picks his way; and woe to him who neglects to learn what others may have done before him. To a large university, therefore, a large library is something absolutely indispensable. The collection at the University of Illinois has been and still is inadequate; only in a few lines does it approximate more than a primal working group of books. Hence the growth must be rapid, more so than it is now, if the University of Illinois is ever to come abreast in library resources with other institutions of its class."

THE QUINE LIBRARY OF THE COLLEGE OF MEDICINE¹¹

The nucleus of the Quine Library of the College of Medicine was a collection of books given to the College of Physicians and Surgeons of Chicago by Mrs. A. Reeve Jackson in 1892 after the death of Dr. Jackson, the first president of the College.

Although unimportant in itself, this gift interested Dr. Quine in libraries as a means of promoting medical education and prompted him to donate a thousand volumes for the establishment of a students' library at the College of Physicians and Surgeons. During the years when this library was trying to prove its usefulness and justify its right for support, Dr. Quine was its loyal friend, and made an annual donation of three hundred dollars toward its maintenance.

For some time Dr. Bayard Holmes, who had made a study of library methods, performed the duties of librarian, but in 1895 a regular librarian was employed to classify and organize the library, and a special room was set apart for library purposes.

The library has been the recipient of many donations ranging from single pamphlets to over two thousand volumes. This large gift consisted of bound journals and formed the major part of the collection known as the "Columbus Memorial Library." With the moving of the "Senn Collection" to the Crerar Library there was no longer need for another medical library in the "Loop District" of Chicago, and the Columbus Memorial Collection was added to the Quine Library.

By the beginning of 1902, 5,000 volumes had been accumulated, a large proportion of the books having been given by members of the faculty, or secured by exchange with other libraries. At the beginning of 1910, the library had grown to 10,000 volumes. The growth from that time is represented by the following statistics:

During	1910-11	the library	increased to	10,375	volumes.
"	1911-12	"	"	"	"
"	1912-13	"	"	"	"
				10,876	"
				11,151	"

¹¹A special statement prepared by William H. Browne, Secretary of the College of Medicine.

During 1913-14 the library increased to 11,701 volumes

"	1914-15	"	"	"	"	14,200	"
"	1915-16	"	"	"	"	15,901	"
"	1916-17	"	"	"	"	17,668	"
"	1917-18	"	"	"	"	18,799	"

The periodical subscription list now numbers some two hundred and fifty English, German, French and Italian journals of medicine, dentistry and the allied sciences.

A Dental Department has been added to the library and a small but well selected collection of dental books and journals has been secured. Additions are constantly being made and a valuable working collection of dental books is rapidly being formed.

In January, 1914, a library committee, consisting of Dr. Dreyer, Dr. D. J. Davis, Dr. A. C. Eycleshymer, Dr. C. A. Wood and Dr. Coolidge, was appointed. Since the College of Physicians and Surgeons became the College of Medicine of the University of Illinois the library has grown very rapidly, much in the number of volumes and more in scientific importance. The aim of the library committee has been to complete the journal files, but the task has been unusually difficult, owing to the war conditions.

After considering the books needed by the students, the departments conducting research work have been given first consideration in the purchase of journal sets, monographs and textbooks.

The library, situated as it is in the heart of the medical center of Chicago, has an opportunity to serve a large proportion of the medical interest of Chicago, as well as the students and faculty of the college with which it is connected, and the hope is that it may grow to meet this opportunity.

A NEW LIBRARY BUILDING

The crowded condition of the Library Building in the year 1912 made it evident that it would be necessary to make prompt provision for additional room, both to accommodate the increasing number of volumes, and to render the facilities of the Library fully available to students and faculty. As it was felt by the

trustees that the erection of a building large enough to meet the present needs of the University and the demands of the immediate future was impossible at that time, a substantial addition was made in 1914 to the structure erected in 1897.¹² But as it was evident that only temporary relief would be afforded by this measure, plans for a larger and adequate building were given consideration at the same time, to be erected at the earliest date that the resources of the University would permit.¹³ On January 7, 1913, tentative plans were presented to the Board by the supervising architect for a structure to be erected south of the junction of Wright Street and Armory Avenue. The plan then presented, but as subsequently modified in certain respects, calls for a building having its north and south axis on the center of Wright Street prolonged, and its east and west axis coincident with the east and west axis of the Armory, prolonged. It is proposed to erect the building in sections, the later sections to be added as needed.¹⁴ It has been estimated that the erection of the first unit will necessitate an expenditure of from \$750,000 to \$1,000,000.¹⁵ The first unit of the Library Building was one of four structures which it was the intention of the trustees to build from the special \$2,000,000 appropriation asked of the Legislature in 1917 for the inauguration of a comprehensive building program.¹⁶ The decision of the Governor and the General Assembly to curtail the erection of all buildings by state institutions during the biennium 1917-19 will necessitate the postponement of the erection of the new Library Building for at least two years.

To tide over the time until the new library building could be erected the trustees decided to add to the present structure.

MUSEUMS

At the second meeting of the Board of Trustees of the University, held May 8, 1867, Regent Gregory, chairman of the

¹²Rept., Univ. of Ill., 1914, pp. 191, 273, 704, 725, 727

¹³Rept., Univ. of Ill., 1914, pp. 136, 148, 160, 259, 264, 674, 698

¹⁴Ibid, pp. 160, 725; 1916 pp. 299, 922, 933; Min. of Bd. of Trustees, Univ. of Ill., 1916-18, p. 100

¹⁵Rept., Univ. of Ill., 1916, p. 934; Min. of Bd. of Trustees, Univ. of Ill., 1916-18, p. 100

¹⁶Min. of Bd. of Trustees, Univ. of Ill., 1916-18, p. 262

committee on faculty and course of study, made a detailed report which was accepted by the trustees and ordered published "as embodying the aims and designs of the University." In this report the following paragraph appears:¹⁷

"The department of Fine Arts will require casts, photographs or engravings of the great masterpieces in art. These may be obtained at reasonable rates, and original drawings, paintings and sculptures will in due time be added. The healthful, refining and stimulating influence of such collections on the minds of the young must be seen to be properly appreciated."

The limited funds of the University were evidently thought by the Board insufficient to permit of an appropriation for objects of art, and an art collection when finally started came as a result of a campaign instituted by Regent Gregory among the citizens of Urbana and Champaign. In the annual meeting in the spring of 1874 Dr. Gregory announced that about \$2,000 had been subscribed for this purpose, and requested that the large hall above the library (then in University Hall) be set apart for the art collection.¹⁸

In December of the same year Dr. Gregory reported that the proposed plan had been consummated and that the University was "now in possession of one of the best collections of casts of celebrated statuary, and other sculptures, to be found in this country."¹⁹

The collection comprised also "a large number of fine engravings, and a hundred photographs taken directly from the original paintings in the great national galleries."

The Art Museum remained in University Hall until 1897, and was then removed to the newly constructed Library Hall.²⁰ Eleven years later, when the growth of the Library and the Library School necessitated the use of the entire building by these interests, the art objects were again moved, this time to various University buildings. Of the objects contained in the original collection nine heroic antique statues were placed in the foyer of the Auditorium, three in University Hall and one

¹⁷Rept., Univ. of Ill., 1878, p. 60

¹⁸Rept., Univ. of Ill., 1873, pp. 91-92

¹⁹Rept., Univ. of Ill., 1876, p. 91

²⁰Rept., Univ. of Ill., 1898, p. 193

in Lincoln Hall; twenty reduced statues were placed in University Hall, one in Lincoln Hall and four in Engineering Hall; thirty-three busts were placed in University Hall, sixty-six in Lincoln Hall and one in Engineering Hall. The various bas reliefs, vases, relief heads, medallions in plaster, engravings, lithographs, photographs and paintings were similarly distributed. Upon the erection of a suitable building it is expected that these objects will be again assembled for display as a single collection.

Since 1877 biennial appropriations have been made by the General Assembly for "cabinets" as follows:²¹

STATE APPROPRIATIONS FOR 1869-1911
CABINETS AND COLLECTIONS

Biennium	Amount
1877-79.....	\$ 6,500.00
1879-81.....	1,000.00
1881-83.....	1,000.00
1883-85.....	2,000.00
1885-87.....	2,000.00
1887-89.....	2,000.00
1889-91.....	1,000.00
1891-93.....	1,000.00
1895-97.....	2,000.00
1897-99.....	2,000.00
1899-1901.....	2,000.00
1901-03.....	2,000.00
1903-05.....	4,000.00
1905-07.....	4,000.00
1907-09.....	4,000.00
1909-11.....	4,000.00
1911-13.....	8,000.00
Total	\$48,500.00

These sums have been expended in building up not only the Fine Arts Museum already described but also various departmental museums and collections to be mentioned later. Among the more important additions made to the fine arts collection

²¹Special Report by Comptroller, Univ. of Ill., on State Appropriations, April 3, 1913, Schedule 211

within the last ten years is a series of 81 German and Japanese prints purchased from the St. Louis Exposition in 1905.²²

The most noteworthy change in the museum equipment of the University during the past decade was the creation of two new museums in 1911 known respectively as the Museum of Classical Archeology and Art and the Museum of European Culture. These have been installed in rooms on the fourth floor of Lincoln Hall.²³ A description of these museums by their respective curators follows.

THE MUSEUM OF NATURAL HISTORY²⁴

Previous to 1909, the collections of Natural History were contained in a large room in University Hall. This room was poorly lighted and the collections were in constant danger of destruction by fire. In 1909, the material was removed to the fireproof hall in the new addition to the Natural History Building. Since the new hall has but two-thirds as much floor space as the old room in University Hall, it has been necessary to utilize a room on the upper floor of the Physics Building to care for the surplus collections. A quantity of material not affected by dampness has also been stored in a large room in the basement of the Natural History Building.

In 1913, the University cooperating with the American Museum of Natural History and the American Geographical Society, participated in the Crocker Land Expedition to Greenland and adjacent parts of Arctic America. The collections brought back by the expedition, including upwards of 800 specimens of mammals, birds, mollusks and ethnological material, add very materially to the value of the Museum exhibits.

Since the removal of the collections from the old hall, much valuable material has been acquired. Among this material are an excellent series of implements of the Indians of the New England states, many carefully prepared specimens from the Pacific coast and the Bermudas, collected by former students; the Barnum collection of 2,000 birds eggs, especially rich in the

²²Register, University of Illinois, 1916-17, p. 60

²³Rept., Univ. of Ill., 1912, p. 434

²⁴By Frank Collins Baker

rarer species of the southwestern states; extensive collections of mollusks from North and South America, including a very complete collection of the river mussels (Unionidae) of the United States; a large collection of Pleistocene fossils from Illinois; a large assortment of gems and precious stones; and a collection of the more common minerals. The Museum collections now number upwards of 200,000 specimens.

During the curatorship of Professor Frank Smith the old wooden cases were largely replaced by the modern bronze and glass cases, so that a greatly improved appearance in the exhibition hall has been effected. The collections have also been cataloged, both numerically in book form and indexed by cards, and it is possible for the first time in the history of the Museum to know what is in the possession of this department.

The increase in the Museum collections and the demand for their proper display made it evident that sooner or later it would be necessary to appoint a trained museum man who could give his entire time to the development and care of the Museum. In January, 1918, this was done.

The Museum is now being developed along two quite distinct lines. First, the exhibit series which, being made distinctively educational, include a synoptic collection of the animal kingdom, embracing the living and the extinct groups arranged in their natural orders and showing their relationships. This is accomplished by the aid of models, diagrams, figures, specimens and descriptive labels. A case illustrating different kinds of variation in animal life is exhibited near this collection.

For the agricultural student or the practical farmer, a model showing the twelve most injurious insects that infest the corn plant has been prepared. The group contains wax models of the corn plants with the insects in all stages of growth feeding upon them.

For the interpretation of the out-of-doors (Ecology) a habitat group has been made showing the life in and about an old decaying stump. The background is an enlarged, carefully colored photograph, 40 by 60 inches, of the Brownfield Woods. The plants and other life of such a place are shown.

An economic collection illustrating the manufacture of pearl and ivory buttons, the former from the pearl oyster, and the latter from the ivory nut, has been presented to the Museum by a large manufacturer. It shows the processes which are necessary to produce these articles from the raw material.

The above collections and exhibits indicate the different groupings into which the exhibit series naturally form themselves. These will be expanded and enlarged to include all subjects that permit of display.

The second line of development is the research or study series. It includes large series of specimens which are used for research purposes and which form the basis for papers already published or for papers in preparation. This line of development is of the highest value, since the accumulation of type or otherwise authentic material, draws men to the University for its consultation, or brings requests for the loan of critical material for comparison. At the present time an effort is being made to accumulate as complete a collection as possible of the Mollusca of North America, as well as material from the Pleistocene deposits of America.

The time is evidently not far distant when a Museum Building will be a necessity on the campus and the arrangement of the exhibits and the accumulation of the research series are planned with this end in view. With comfortable rooms in which the research series may be made accessible to advanced workers, the museum will become a center of scientific study, where the botanist, the geologist, the zoologist and the ethnologist may come and find material upon which to base their papers and books. The undergraduate student, as well as the casual visitor, may visit the exhibit halls and supplement the information received in the lectures and in the texts.

THE MUSEUM OF CLASSICAL ARCHAEOLOGY AND ART²⁵

A review of the growth of the Classical Museum during the six and one-half years in which it has been open to the public must begin with the year 1911, in which the formation of the collection was authorized by the Board of Trustees. In that

²⁵By Arthur Stanley Pease

year Rooms 402 and 404 Lincoln Hall were put at the disposal of the Museum, the former a large attic room of irregular shape but good lighting, the latter a small and rather dark room intended for unpacking and preparing specimens.

The academic year 1911-12 was spent in the acquisition of such material as the modest initial appropriation permitted. It was from the beginning recognized that the museum should have two main functions; one scientific affording material for use by students in connection with courses in classics, ancient history, private life, the history of art, archaeology and related topics; the other more broadly artistic, as affording both to students and the visiting public an opportunity to inspect and enjoy objects typical of the best artistic work of antiquity.

The old art collection of the University, made in 1876, parts of which are still here and there preserved, emphasized the period of Hellenistic and Roman sculpture. Not to duplicate these objects unnecessarily, it seemed desirable in the newly founded museum to lay especial stress upon (1) the beginnings of Greek art in the remains of the Aegaeon Period and (2) the highest development of the art in the fifth and fourth centuries B. C. It was with a collection representing chiefly these two aspects of ancient culture that the museum was finally opened to the public on November 8, 1912. On that occasion a formal address was delivered by Professor G. H. Chase of Harvard University upon "The Relation of Art Collections to the University and the People of the State."

Since that date the history of the Museum has been not so much one of definite epochs as one of gradual and constant development. Increasing appropriations and a few generous gifts²⁶ and loans²⁷ have made it possible to represent, at first scantily, and latterly somewhat more fully, not only the field of sculpture but also those of ancient painting, architecture (chiefly through the medium of photographs and diagrams), the smaller arts such as glass and metals, and, by means of originals and models, many features of ancient private life.

²⁶Among donors should be especially mentioned Mr. W. G. Hibbard of Chicago

²⁷By Professor J. S. Kingsley, Mr. B. F. Peadro, Professor A. T. Olmstead and others

For this constant growth in the collection, increasing space has been required. Room 404 was early devoted to the display of models and other objects of historical rather than artistic interest. In 1914, Room 406 was opened for the use of the Museum and into it were put the parts of the collection belonging to the Hellenistic and Roman periods. In 1917, a fourth room (410) was set aside to receive the Babylonian and Egyptian materials which had until then been included with the Greek objects. Each of these enlargements, in addition to the extra space which it has made available, has also permitted a more satisfactory classification of specimens and a corresponding diminution of the heterogeneous character which must necessarily be found in a small museum of this kind.

A detailed catalog of the objects acquired by the Museum would here be out of place, but a few statistics may be of interest. At the present time the Museum possesses 20 casts of statues in the round, 14 busts, 127 casts of reliefs, 195 framed pictures and about 2,190 photographs mounted on cards. Most of the other objects are too varied to lend themselves readily to such enumeration, yet there may be mentioned 29 original Greek Papyri, 35 ancient lamps, 86 pieces of ancient glass, and several hundred ancient coins. The proportion of originals secured has gradually increased and in 1913-14 half the amount expended upon specimens was for originals. Expense analyses for the fairly typical years 1912-14 show that of the total amounts expended a little more than 68% was for specimens; 17% for cases and framing; 12% for freight; 2% for labor; and 1% for supplies.

That the number of visitors has increased as the collection has been developed and become more widely known, is indicated by the following table:

Nov., 1912-May, 1913.....	933
Oct., 1913-June, 1914.....	3,762
July, 1914-June, 1915.....	5,883
June, 1915-June, 1916.....	6,210
July, 1916-June, 1917.....	6,887
June, 1917-June, 1918.....	6,529

Departments and individual students alike have also used more extensively the facilities of the Museum. Public museum

lectures have been tried on several occasions, but the limited space in the rooms and the inconveniences and dangers to the specimens resulting from the crowded condition have greatly hampered this very important feature of the work and for the development of a system of museum docents we must wait till the completion of a museum building with adequate space for both collections and visitors. The rapid growth of the collection and the frequent changes necessary in its arrangement have thus far discouraged the publication of a printed catalog, but this lack has been in part obviated by the prompt and clear labeling of each object on exhibition.

On the whole, the collection has been kept a representative one, containing some of the best and most typical work from many different fields. The ampler space of a new museum building, however, will make it possible to develop the collection on the side of Greek sculpture, for additions to which our present quarters offer little opportunity.

THE ORIENTAL MUSEUM²⁸

The Oriental Museum was formally organized by action of the Board in 1917 and was opened in temporary quarters at 410 Lincoln Hall the next year. In it were incorporated the various oriental objects hitherto preserved in the Museum of Classical Archaeology, and to these were added by loan and by purchase many other originals. Already it possesses a collection of material from the Near East which is of the greatest value in illustrating the various periods of its history. Especially noteworthy is the large amount which throws light upon the Bible and upon Biblical times.

To the museum has now been transferred the collection from the excavations of the Egypt Exploration Fund which was presented to the University by Mr. W. G. Hibbard, Jr. From Abydos comes a complete series of vases, from the prehistoric times to the twenty-sixth dynasty; eight slate palettes of prehistoric date; weights, an offering table, a Graeco-Roman grave stele, and Coptic Coffins; ostraka with hieroglyphic and demotic

²⁸By Oliver Ten Eyck Olmstead

writing; two mummified ibises and one hawk. Pottery comes from Ballabish and Sawama. A head piece and a foot piece were found at Atfieh and mummy cloths and necklaces at Taieba. A prehistoric flint knife is loaned by Professor J. S. Kingsbury, and two scarabs and a series of small statuettes by Mr. B. F. Peadro. By purchase has been secured a beautiful diorite head of the best period, a smaller head of marble, two inscribed statuettes, and a collection of alabaster vases.

The Babylonian tablets in the Museum number nearly 1,700 and are all unpublished. Over half come from the dynasty of Ur, 2480-2361 B. C., and include the archives of the national stockyards at Drehem, the business records of the city of Umma, vouchers for the expense of the royal messengers, and stamped clay tags for the parcel post. They are dated in the reigns of Dungi, Bur, Sin and Gimil Sin. From Larsa come four hundred from the end of the Nisin period and the age of Ham-murapi. Two hundred more represent the Chaldaean and Persian period and include dates in the reigns of Nabopolassar, Nebuchadnezzar, Evil Merodach, Nabunaid, Cyrus, Cambyses, Darius. Six cones and three tablets give the royal formulae of Singashid of Uruk, and two student exercise tablets may also be mentioned. By loan from the curator come the fragments of bricks of Assyrian kings and of Nebuchadnezzar, also fragments of colored bricks from Babylon. By recent purchase, the Museum has acquired a splendid collection of Babylonian seals which will be shortly published in a separate volume. The tablets are likewise in process of decipherment.

Through the kindness of Dr. B. B. Charles of Philadelphia, to the Museum has been loaned a unique collection of squeezes or paper impressions of inscriptions, and these have been framed and hung as far as the limited space would allow. They include all the Hittite inscriptions discovered or newly collected by him and his colleagues and published in "*Travels and Studies in the Nearer East*," also a Hittite stele, the records of Tiglath Pileser I and Shalmaneser III at the Tigris source, and the Bavian inscription of Sennacherib. The curator has added squeezes of Phoenician, Carthaginian and Palmyrene inscriptions.

By loan of the curator, the Museum has the best collection in existence of pottery fragments from the Near East, the result of a pottery survey representing over two hundred sites in every part of the former Turkey in Asia. Especially to be mentioned are the groups of the earliest ware from Asia Minor and Armenia, the Hittite ware of the best period, Assyrian ware, lamps, statuettes and other minor objects.

From Palestine come a fragmentary roll of the Law, a roll of Esther, a Hebrew charm, pottery, fragments of mosaic work, glass prehistoric flints, models of modern furniture, used purple shells from Sidon, two inscribed Palmyrene tesserae, the loan of the curator. A medical work from the middle ages, Arabic in Hebrew characters, is loaned by Professor A. S. Pease. Finally, mention should be made of the many unpublished photographs of the Near East. It is hoped that the Museum will soon be able to move into larger quarters which will permit adequate exhibition of the treasures already accumulated and of what may be secured in the future.

OTHER NEW COLLECTIONS

A number of other collections have been established during the past fourteen years.

THE COMMERCE MUSEUM²⁹

For its courses in industrial economics and commerce the University has had since 1905 a working collection of the materials of commerce; lanterns and several hundred slides; political and industrial maps; and diagrams and stereoscopic views illustrating various phases of commerce and industry. Most of the articles constituting the commercial museum are the gift of the Philadelphia Commercial Museum, and of private manufacturing and mercantile establishments.

MINING ENGINEERING³⁰

This department has a complete exhibit of sized coal as prepared by typical Illinois washeries, the raw materials and

²⁹From Univ. of Ill. Annual Registers, 1913-14, pp. 75-76, and 1916-17, p. 62.

³⁰Univ. of Ill. Annual Register, 1913-14, p. 79

the finished products illustrating the briquetting of coal, models of a metalliferous mine and of timber and steel mine supports, a complete exhibit of explosive and blasting materials and appliances, the Braeger, Fleuss and Westphalia breathing apparatus, and all of the appliances necessary for mine rescue and first aid demonstration, a collection of safety-lamps and other mine lighting devices, and working drawings and photographs of mine machinery.

RAILWAY ENGINEERING³¹

The department of Railway Engineering has an unusually complete exhibit of photographs illustrating the development in transportation; an exhibit showing the progress in the design and manufacture of rails; models of locomotive valve gears; a full-sized model of the front end of a Richmond compound locomotive; and sets of working drawings of locomotives, cars and other railway equipment.

This collection was begun in 1906. During the past years 1912-14 an especially large number of photographs of both American and foreign equipment, forms of bridge construction, etc., were added.

Several other departments of the College of Engineering possess collections of historical materials drawn from their respective fields of practise. The department of mechanical engineering is the custodian of a 600 H. P. vertical triple-expansion engine, direct connected with an electric generator, a type of machine in common use for power station service twenty years ago. The departments of Civil Engineering and Theoretical and Applied Mechanics maintain exhibits of tested specimens and structures.³²

³¹Univ. of Ill. Annual Register, 1913-14, p. 79. Cf. Univ. of Ill. Registers, 1903-04, pp. 47-52; 1916-17, pp. 60-62

³²Cf. Univ. of Ill. Annual Register, 1916-17, p. 62

CHAPTER V

THE FACULTY

The first president (or "Regent") of the University was elected March 12, 1867 and entered upon the duties of his office on the first day of the following month.¹ During the next twelve months three additional members of the faculty were chosen, by whom, together with the Regent, instruction was given during the first term—extending from March 2, 1868 to June 13, 1868.² A year later the Regent reported that the instructional force had been increased to three professors and three assistant professors, representing the departments of History, English, Chemistry, Agriculture, Botany, Mathematics, Bookkeeping and Modern Languages. There were also two non-resident lecturers—on Pomology and on English Literature, respectively.³

For the first twenty years, the maximum number of members of the University faculty in any one year was thirty-three—in 1878-79.

In 1887-88 there were only twenty-nine members, but for the next eight years there was a regular yearly increase and by 1895-6 there were eighty-four. The addition of the College of Medicine in 1897⁴ increased the number of the instructional staff to 170 for the year 1896-7. For the next six years there was again a steady annual increase, and by the year 1903-4 the number had reached 351.

During the sixteen years from 1904 to 1920 the number of members of the faculty rose from 351 to 943. This was an increase of 592, or 168 per cent.

In the following table the size of the faculty is given for each year since the opening of the University. Members of the library staff are included in the enumeration, but clerks, stenographers and miscellaneous employees of the University are not included.

¹Rept., Univ. of Ill., 1868, pp. 18, 31.

²Ibid, pp. 87, 94

³Rept., Univ. of Ill., 1869, p. 62

⁴Ill. Sch. Rept., 1910-12, p. 480



*Gas Engine
Annex*



*Mechanical
Engineering
Laboratory*



*Mining
Laboratory*



*Locomotive Testing
Laboratory*



Ceramics Kiln House

SIZE OF FACULTY BY YEARS, 1867-1920

Year	Faculty	Year	Faculty
1867-68.....	4	1895-96.....	84
1868-69.....	11	1896-97.....	170
1869-70.....	19	1897-98.....	184
1870-71.....	20	1898-99.....	194
1871-72.....	24	1899-1900.....	229
1872-73.....	25	1900-01.....	242
1873-74.....	25	1901-02.....	297
1874-75.....	30	1902-03.....	316
1875-76.....	27	1903-04.....	351
1876-77.....	25	1904-05.....	350
1877-78.....	29	1905-06.....	408
1878-79.....	33	1906-07.....	442
1879-80.....	29	1907-08.....	472
1880-81.....	28	1908-09.....	497
1881-82.....	26	1909-10.....	538
1882-83.....	24	1910-11.....	555
1883-84.....	25	1911-12.....	583
1884-85.....	27	1912-13.....	587
1885-86.....	29	1913-14.....	764
1886-87.....	29	1914-15.....	777
1887-88.....	29	1915-16.....	821
1888-89.....	30	1916-17.....	868
1889-90.....	32	1917-18.....	843 ^s
1890-91.....	39	1918-19.....	800
1891-92.....	43	1919-20.....	943
1892-93.....	48		
1893-94.....	67		
1894-95.....	80		

The increase from 1903-04 to 1919-20 was 592.

In the next table the constitution of the faculty for 1903-04 and for 1919-20 according to rank is indicated. These figures do not include duplicates. As in the preceding table, members of the library staff are included in the enumeration, but not

^sDoes not check with figure given in Register, Univ. of Ill., 1917-18, pp. 516-517

clerks, stenographers and miscellaneous employees of the University.

FACULTY 1903-04 AND 1919-20

ACCORDING TO RANK

Rank	1903-04			1919-20		
	Men	Women	Total	Men	Women	Total
Professors	103	4	107	164	2	166
Associate Professors	13	1	14	38	..	38
Assistant Professors	62	3	65	107	3	110
Associates	..	..	..	108	12	120
Lecturers	2	..	2	8	..	8
Instructors	112	28	140	112	36	148
Assistants	13	2	15	148	60	208
Graduate Assistants	..	..	..	31	5	36
¹ Student Assistants	3	..	3	55	2	57
² Total	308	38	346	771	120	891
⁴ Officers of Administration	5	..	5	16	36	52
TOTAL	313	38	351	787	156	943

¹Includes those in Military Science

²Does not include administrative officers

³Includes library assistants of which there are 44 men and 6 women, duplicates excluded

ADDITIONS TO THE FACULTY, 1904 TO 1920

The following persons at present members of the University faculty (in 1919-20), were appointed during the sixteen years from 1904 to 1920. The list includes only persons of the rank of assistant professor or above.⁶

THE COUNCIL OF ADMINISTRATION

1904 Edmund Janes James, Ph. D., LL.D., President.

1907 William Freeman Myrick Goss,⁷ M.S., D.Eng., Professor of Railway Engineering, Dean of the College of Engineering, Director of the Engineering Experiment Station and Director of the School of Railway Engineering and Administration.

⁶The date preceding each name is that on which the person became a member of the faculty of the University, but not necessarily that on which he was appointed to the position now occupied. The order is that of seniority

⁷Resigned March 1, 1917

- 1913 Kendric Charles Babcock, B.Lit., Ph.D., LL.D., Dean of the College of Liberal Arts and Sciences.
- 1906 Frederick Brown Moorehead, A.B., D.D.S., M.D., Professor of Oral Surgery, Pathology and Bacteriology, and Acting Dean of the College of Dentistry.
- 1913 Albert Chauncey Eycleshymer, B.S., Ph.D., M.D., Professor of Anatomy, Head of the Department and Dean of the College of Medicine.
- 1916 Henry Winthrop Ballantine, A.B., LL.D., Professor of Law and Dean of the College of Law.
- 1911 Charles Russ Richards,⁸ M.E., M.M.E., Dean of the College of Engineering and Director of the Engineering Experiment Station.
- 1918 Ruby Elizabeth Campbell Mason, A.M., Dean of Women.
- 1917 Werret Wallace Charters,⁹ Ph.D., Professor of Education and Dean of the College of Education.
- 1919 Charles Ernest Chadsey, Ph.D., Litt.D., Professor of Education and Dean of the College of Education.
- 1911 Charles Manfred Thompson, Ph.D., Professor of Economics and Dean of the College of Commerce and Business Administration.
- 1919 George Frederick Ney Dailey, Capt., Signal Corps, U.S.A., Professor of Military Science and Tactics and Commandant.

THE SENATE¹⁰

- 1904 Frederick Green, A.M., LL.B., Professor of Law.
- 1904 James Wilford Garner, Ph.D., Professor of Political Science.
- 1905 Edward Bartow, Ph.D., Professor of Sanitary Chemistry, and Director of the State Water Survey.
- 1907 William Albert Noyes, Ph.D., LL.D., Professor of Chemistry and Director of the Chemical Laboratory.

⁸Appointed as Dean and Director March 1, 1917

⁹Resigned, August 31, 1919

¹⁰The Senate is composed of all University officers of full professorial rank and all others in charge of independent departments of instruction. Members of the Council are therefore members of the Senate also, but their names are not repeated in the Senate list

- 1907 Ernest Ritson Dewsnap,¹¹ A.M., Professor of Railway Administration.
- 1906 George Abram Miller, Ph.D., Professor of Mathematics.
- 1907 Edward Cary Hayes, Ph.D., Professor of Sociology.
- 1908 Julius Goebel, Ph.D., Professor of German.
- 1909 Phineas Lawrence Windsor, Ph. B., Librarian and Director of the Library School.
- 1909 Boyd Henry Bode, Ph.D., Professor of Philosophy.
- 1909 Henry Baldwin Ward, Ph.D., Professor of Zoology.
- 1909 Harry Harkness Stock, B.S., E.M., Professor of Mining Engineering.
- 1907 Stuart Pratt Sherman, Ph.D., Professor of English and Chairman of the Committee of the Department of English.
- 1912 Edward Harris Decker,¹¹ A.B., LL.B., Professor of Law and Acting Librarian of the College of Law.
- 1909 John Archibald Fairlie, Ph.D., Professor of Political Science.
- 1910 John Norton Pomeroy, A.M., LL.B., Professor of Law.
- 1911 Bruce Willet Benedict, B.S., Manager of Shop Laboratories in the Department of Mechanical Engineering.
- 1912 William Edward Burge, Ph.D., Assistant Professor of Physiology and Acting Head of the Department.
- 1909 Ernest Ludlow Bogart, Ph.D., Professor of Economics.
- 1909 William Green Hale, B.S., LL.B., Professor of Law.
- 1912 Madison Bentley, B.S., Ph.D., Professor of Psychology and Director of the Psychological Laboratory.
- 1913 Harry Alexis Harding, Ph.D., Professor of Dairy Bacteriology.
- 1913 William Trelease, D.Sc., LL.D., Professor of Botany and Acting Head of the Department.
- 1913 John Sterling Kingsley, D.Sc., Professor of Zoology.
- 1906 William Shirley Bayley, Ph.D., Professor of Geology.
- 1906 Walter Costella Coffey, M.S., Professor of Sheep Husbandry.
- 1907 Laurence Marcellus Larson, Ph.D., Professor of History.
- 1907 Otto Eduard Lessing, Ph.D., Professor of German.

¹¹Resigned, 1920

- 1907 Ellery Burton Paine, M.S., E.E., Associate Professor of Electrical Engineering and Acting Head of the Department.
- 1908 Edward Wight Washburn, Ph.D., Professor of Ceramic Chemistry and Head of the Department of Ceramic Engineering.
- 1913 Loring Harvey Provine, B.S., A.E., Professor of Architectural Engineering and Acting Head of the Department of Architecture.
- 1914 Frank Lincoln Stevens, Ph.D., Professor of Plant Pathology.
- 1907 Herbert Fisher Moore, B.S., M.M.E., Research Professor of Engineering Materials.
- 1914 John Lawrence Erb, F.A.G.O., Director of the School of Music and University Organist.
- 1915 Frederick Haynes Newell, B.S., D.Eng., Professor of Civil Engineering and Head of the Department.
- 1915 Kenneth McKenzie, Ph.D., Professor of Romance Languages and Head of the Department.
- 1909 William Abbott Oldfather, Ph.D., Professor of the Classics.
- 1914 Charles Alton Ellis, A.B., Professor of Structural Engineering.
- 1915 Louise Freer, B.S., Director of Physical Training for Women.
- 1909 Arthur Stanley Pease, Ph.D., Professor of the Classics and Curator of the Museum of Classical Art and Archaeology.
- 1909 Charles Zeleny, Ph.D., Professor of Zoology.
- 1909 John Driscoll Fitz-Gerald II, Ph.D., Professor of Spanish.
- 1913 Albert Howe Lybyer, Ph.D., Professor of History.
- 1916 Ernest Bernbaum, Ph.D., Professor of English.
- 1916 Cullen Warner Parmelee, B.S., Professor of Ceramic Engineering.
- 1911 Alexander Dyer MacGillivray, Ph.D., Professor of Systematic Entomology.
- 1917 Albert Ten Eyck Olmstead, Ph.D., Professor of History and Curator of the Oriental Museum.

- 1913 Arthur Cutts Willard, B.S., Professor of Heating and Ventilation.
- 1916 Robert Graham, D.V.M., Professor of Animal Pathology.
- 1918 Burdette Ross Buckingham, Ph.D., Professor of Education and Director of the Bureau of Educational Research.
- 1912 William Leonidas Burlison, Ph.D., Professor of Crop Production.
- 1910 Harrison Edward Cunningham, A. B., Director of the University Press and Secretary of the Board of Trustees.
- 1907 Bethel Stewart Pickett, M.S., Professor of Pomology.
- 1908 Herman Bernard Dorner, M.S., Professor of Floriculture.
- 1910 James Lloyd Edmonds, B.S., Professor of Horse Husbandry.
- 1915 Melvin Lorenius Enger, B.S., C.E., Professor of Theoretical and Applied Mechanics.
- 1911 Walter Frederick Handschin, B.S., Professor of Farm Organization and Management, State Leader of County Demonstration Work, and Acting Vice-Director of the Demonstration Service.
- 1911 Harvey Herbert Jordan, B.S., Assistant Professor of General Engineering Drawing and Assistant Dean of College of Engineering.
- 1918 Jerome Edward Readhimer, B.S., Professor of Soils (Extension).
- 1910 Henry Perly Rusk, M.S., Professor of Beef Cattle Husbandry.
- 1913 Hiram Thomas Scovill, A.B., C.P.A., Professor of Accountancy.
- 1910 James Byrnie Shaw, D.Sc., Professor of Mathematics.
- 1915 Robert Stewart, Ph.D., Professor of Soil Fertility.
- 1918 Arthur Byron Coble, Ph.D., Professor of Mathematics.
- 1918 Everett Edgar King, A.B., M.C.E., Professor of Railway Civil Engineering.
- 1918 James Therod Rood, Ph.D., Professor of Railway Electrical Engineering.

- 1919 Ira Samuel Griffith, A.B., Professor of Industrial Education.
- 1916 Roger Adams, Ph.D., Professor of Chemistry.
- 1912 Joseph Howard Beard, M.D., Professor of Hygiene and University Health Officer.
- 1912 John A. Detlefsen, D.Sc., Professor of Genetics.
- 1909 George Tobias Flom, Ph.D., Professor of Scandinavian.
- 1919 Walter Lee Gaines, Ph.D., Professor of Milk Production.
- 1908 Simon Litman, Dr. Jur. Pub. et Rer. Cam., Professor of Economics.
- 1919 Eric Keightley Rideal, Ph.D., Visiting Professor of Physical Chemistry.
- 1907 Thomas Edmund Savage, Ph.D., Professor of Stratigraphic Geology.
- 1919 Lorado Taft, M.L., L.H.D., Non-Resident Professor of Art.
- 1912 Harrison August Ruehe, M.S., Assistant Professor of Dairy Manufactures and Acting Head of the Department of Dairy Husbandry.
- 1912 Albert Lemuel Whiting, Ph.D., Professor of Soil Biology.
- 1919 Cliff Winfield Stone, Ph.D., Acting Professor of Educational Psychology.
- 1919 Terence Thomas Quirk, Ph.D., Associate Professor of Geology and Chairman of the Department.
- 1920 Edwin Herbert Cameron, Ph.D., Professor of Educational Psychology.

ASSOCIATE PROFESSORS

- 1909 Jacob Kunz, Ph.D., Associate Professor of Mathematical Physics.
- 1909 Howard Vernon Canter, Ph.D., Associate Professor of the Classics and Assistant Dean of the College of Liberal Arts and Sciences.
- 1910 David Ford McFarland, Ph.D., Associate Professor of Applied Chemistry.

- 1911 John Mabry Mathews, Ph.D., Associate Professor of Political Science.
- 1917 Nathaniel Cortlandt Curtis, Ph.B., Associate Professor of Architectural Design.
- 1915 Robert Daniel Carmichael, Ph.D., Associate Professor of Mathematics.
- 1913 Martin John Prucha, Ph.D., Associate Professor of Dairy Bacteriology.
- 1909 William Spence Robertson, Ph.D., Associate Professor of History.
- 1911 Arnold Emch, Ph.D., Associate Professor of Mathematics.
- 1915 Howard Bishop Lewis, Ph.D., Associate Professor of Physiological Chemistry.
- 1919 Walter Scott Monroe, Ph.D., Associate Professor of Education and Assistant Director of the Bureau of Municipal Research.
- 1915 Christian Alban Ruckmick, Ph.D., Associate Professor of Psychology.
- 1909 Fred B. Seeley, B.S., Associate Professor of Theoretical and Applied Mechanics.
- 1913 Wilbur M. Wilson, M.M.E., Associate Professor of Structural Engineering.
- 1919 Robert Francis Seybolt, Ph.D., Associate Professor of History of Education.
- 1919 Jay Courtland Hackleman, A.M., Associate Professor of Crops Production.
- 1912 B. Smith Hopkins, Ph.D., Associate Professor of Chemistry.
- 1919 Thomas James Camp, Capt. Inf., U.S.A., Associate Professor of Military Science and Executive Officer.
- 1919 William Demson Alexander, Capt., Field Art., U.S.A., Associate Professor of Military Science.
- 1919 Jesse Benjamin Kommers, B.S., Special Research Associate Professor of Engineering Materials.

ASSISTANT PROFESSORS

- 1907 Edward Hardenbergh Waldo, A.B., M.S., M.E., Assistant Professor of Electrical Engineering.

- 1911 Aretas Wilbur Nolan, A.B., M.S., Assistant Professor of Agricultural Extension.
- 1906 Harrie Stuart Vedder Jones, Ph.D., Assistant Professor of English.
- 1910 Leonard Bloomfield, Ph.D., Assistant Professor of Comparative Philology and German.
- 1907 James Elmo Smith, C. E., Assistant Professor of Civil Engineering.
- 1914 Victor Ernest Shelford, Ph.D., Assistant Professor of Zoology.
- 1909 Earnest Winfield Bailey, M.S., Assistant Professor of Pomology.
- 1915 George Nelson Coffey, Ph.D., Assistant State Leader of County Advisers.
- 1907 Axel Ferdinand Gustafson, M.S., Assistant Professor of Soil Physics.
- 1913 Albert Woodward Jamison, M.S., Assistant Professor of Agricultural Extension.
- 1907 Ernest Van Alstine, B.S., Assistant Professor of Agronomy.
- 1916 James Dater Bilsborrow, B.S., Assistant State Leader of County Advisers.
- 1907 Arthur Robert Crathorne, Ph.D., Assistant Professor of Mathematics.
- 1911 Ralph Kent Hursh, B.S., Assistant Professor of Ceramic Engineering.
- 1907 Jacob Zeitlin, Ph.D., Assistant Professor of English.
- 1915 Virgil R. Fleming, B.S., Assistant Professor of Theoretical and Applied Mechanics.
- 1912 Arthur Charles Cole, Ph.D., Assistant Professor of History.
- 1912 Walter Byron Gernert, Ph.D., Assistant Professor of Plant Breeding.
- 1914 Frederick Nobel Evans, A.B., M.L.A., Assistant Professor of Landscape Gardening.
- 1911 Harry Warren Anderson, Ph.D., Assistant Professor of Pomology.
- 1911 Frederick Charles Bauer, M.S., Assistant Professor of Soil Fertility.

- 1911 George Denton Beal, Ph.D., Pharm.D., Assistant Professor of Chemistry.
- 1908 Florence Rising Curtis, A.M., B.L.S., Assistant Professor of Library Economy.
- 1908 Harrison Frederick Gonnerman, M.S., Research Assistant Professor of Theoretical and Applied Mechanics.
- 1905 Albert Austin Harding, B.Mus., Assistant Professor of Music and Director of the Military Bands.
- 1915 Harry Franklin Harrington, A.M., Assistant Professor of Journalism.
- 1915 Oliver Kamm, Ph.D., Assistant Professor of Chemistry.
- 1911 Aubrey John Kempner, Ph.D., Assistant Professor of Mathematics.
- 1907 Alonzo Plumstead Kratz, M.S., Research Assistant Professor of Mechanical Engineering.
- 1911 Philip Augustus Lehenbauer, Ph.D., Assistant Professor of Plant Physiology.
- 1913 Walter Byron McDougall, Ph.D., Assistant Professor of Botany.
- 1915 Harold Hanson Mitchell, Ph.D., Assistant Professor of Animal Nutrition.
- 1918 Rexford Newcomb, M.Arch., Assistant Professor of Architectural History.
- 1918 John Henry Reedy, Ph.D., Assistant Professor of Chemistry.
- 1913 Gustaf Eric Wahlin, Ph.D., Assistant Professor of Mathematics.
- 1910 Elmer Howard Williams, Ph.D., Assistant Professor of Experimental Physics.
- 1913 Charles Henry Woolbert, Ph.D., Assistant Professor of Speech.
- 1919 Morris M. Leighton, Ph.D., Assistant Professor of Geology.
- 1914 Russell McCulloch Story, Ph.D., Assistant Professor of Political Science.
- 1912 Edward Joseph Filbey, Ph.D., C.P.A., Assistant Professor of Accountancy.
- 1916 Frederic Arthur Russell, Ph.D., Assistant Professor of Business Organization and Operation.

- 1917 Donald Mahaney Allison, A.B., Assistant Professor of Architectural Design.
- 1913 Harold Eaton Babbitt, M.S., Assistant Professor of Municipal and Sanitary Engineering.
- 1919 Paul Everette Belting, Ph.D., Assistant Professor of Secondary Education.
- 1918 Henry Blumberg, Ph.D., Assistant Professor of Mathematics.
- 1916 William Everett Britton, A.M., J.D., Assistant Professor of Law and Librarian of the College of Law.
- 1913 Ernest McChesney Clark, B.S., Assistant Professor of Dairy Production.
- 1910 Herbert LeSourd Creek, Ph.D., Assistant Professor of English and Assistant Dean of Foreign Students.
- 1919 John L. Griffith, A.B., Assistant Professor of Physical Education.
- 1915 Gilbert Gusler, M.S., Assistant Professor of Animal Husbandry.
- 1916 Merlin Harold Hunter, Ph.D., Assistant Professor of Economics.
- 1912 Robert Taylor Jones, B.S., Assistant Professor of Architecture.
- 1919 James McKinney, Assistant Professor of Industrial Education and Director of the Chicago Center.
- 1918 Jean Gilbert MacKinnon, A.M., Assistant Professor of Home Economics.
- 1911 Lloyd Morey, A.B., B.Mus., C.P.A., Assistant Professor of Accountancy and Comptroller.
- 1917 Oliver Ralph Overman, Ph.D., Assistant Professor of Dairy Chemistry.
- 1916 Cyrus Edgar Palmer, M.S., Assistant Professor of Architectural Engineering.
- 1912 Frank Ashmore Pearson, B.S., Assistant Professor of Dairy Economics.
- 1907 George Wellington Pickels, C.E., Assistant Professor of Civil Engineering.
- 1911 Gustav Howard Radebaugh, Assistant Manager of Shop Laboratories.
- 1919 John Burns Read, E.M., Assistant Professor of Mining Engineering.

- 1919 Burke Shartel, S.J.D., Assistant Professor of Law.
1910 William Herschel Smith, M.S., Assistant Professor of Animal Husbandry.
1916 Fred Wilbur Tanner, Ph.D., Assistant Professor of Bacteriology.
1911 Harley Jones VanCleave, Ph.D., Assistant Professor of Zoology.
1913 Harry William Waterfall, B.S., Assistant Professor of Mechanical Engineering.
1915 Gordon Watkins, Ph.D., Assistant Professor of Economics.
1906 Carroll Carson Wiley, C.E., Assistant Professor of Highway Engineering.
1912 Robert Carl Zuppke, Ph.B., Assistant Professor of Physical Education.
1909 Warren Albert Ruth, Ph.D., Assistant Professor of Pomology.
1919 Edwin Hardin Sutherland, Ph.D., Assistant Professor of Sociology.
1919 Paul J. Kiefer, B.S., Assistant Professor of Steam Engineering.
1915 Roscoe Raymond Snapp, B.S., Assistant Professor of Animal Husbandry.
1913 Charles Earl Bradbury, B.P., Assistant Professor of Art and Design.
1919 Russell Dunn Barnes, 1st Lieut., Infantry, U.S.A., Assistant Professor of Military Science and Tactics.
1919 Chauncey Aubrey Bennett, Captain, Field Artillery, U.S.A., Assistant Professor of Military Science and Tactics.
1919 Robert W. Grow, Captain, Cavalry, U.S.A., Assistant Professor of Military Science and Tactics.

COLLEGE OF MEDICINE

PROFESSORS

- 1913 Casey A. Wood, A.M., M.D., Professor of Ophthalmology and Head of the Department.
1913 Norval Pierce, M.D., Professor of Surgery (Laryngology, Rhinology and Otology) and Head of the Division.

- 1913 Albert E. Halstead, M.D., Professor of Surgery and Clinical Surgery.
- 1913 Albert Chauncey Eycleshymer,¹⁰B.S., Ph.D., M.D., Professor of Anatomy, Head of the Department, and Dean.
- 1913 David John Davis, Acting Professor of Pathology, Acting Head of the Department, and Director of the Department of Experimental Medicine.
- 1913 Julius H. Hess, M.D., Professor of Pediatrics and Clinical Pediatrics and Head of the Division.
- 1906 Lee Harrison Mettler, A.M., M.D., Professor of Neurology and Clinical Neurology and Head of the Division.
- 1917 Hugh Alister McGuigan, Ph.D., M. D., Professor of Materia Medica, Pharmacy and Therapeutics.
- 1917 Edward Vail Lapham Browne, B.S., M.D., Professor of Ophthalmology and Head of the Department.
- 1917 Edwin Warner Ryerson, M.D., Professor of Surgery (Orthopedic) and Head of the Division.
- 1916 Harold Douglas Singer, M.D., M.R.C.P., Professor of Psychiatry and Head of the Division.
- 1919 Herman M. Adler, A.B., M.D., Professor of Criminology and Head of the Department.
- 1919 Henry Foster Lewis, A.B., M.D., Professor of Obstetrics and Clinical Obstetrics.
- 1905 Charles Edward Humiston, M.D., Professor of Clinical Surgery.

ASSOCIATE PROFESSORS

- 1908 Charles Mayer Jacobs, M.D., Associate Professor of Clinical Orthopedic Surgery.
- 1906 Joseph C. Beck, M.D., Associate Professor of Surgery (Laryngology, Rhinology and Otology).
- 1910 Nelson Mortimer Percy, M.D., Associate Professor of Clinical Surgery.
- 1918 Frank Smithies, M.D., Associate Professor of Medicine.
- 1905 Edward Louis Heintz, Ph.G., M.D., Associate Professor of Medicine and Clinical Medicine.

¹⁰Included supra under the Council of Administration

- 1910 Maurice Lewison, M.D., Associate Professor of Physical Diagnosis.
- 1912 George Farnsworth Thompson, B.S., M.D., Associate Professor of Surgery and Clinical Surgery.
- 1917 Arthur Richard Elliott, M.D., Associate Professor of Medicine.
- 1910 Otto Herman Rohrlack, Ph.G., M.D., Associate Professor of Obstetrics and Clinical Obstetrics.
- 1913 William Henry Welker, A.C., Ph.D., Associate Professor of Chemistry.

ASSISTANT PROFESSORS

- 1908 Frederick George Dyas, M.D., Assistant Professor of Surgery and Clinical Surgery.
- 1906 Frank Donald Moore, M.D., Assistant Professor of Surgery and Clinical Surgery.
- 1915 Victor Emanuel Emmel, Ph.D., Assistant Professor of Anatomy.
- 1913 Edward Franklin Leonard, M.D., Assistant Professor of Neurology.
- 1913 Charles M. McKenna, M.D., Assistant Professor of Surgery (Genito-Urinary).
- 1914 Roy Lee Moodie, A.B., Ph.D., Assistant Professor of Anatomy.
- 1916 Jesse Elliot Royer, M.D., Assistant Professor of Neurology.
- 1906 Cecil von Bachellet, M.S., M.D., Assistant Professor of Obstetrics.
- 1906 John Michael Lang, M.D., Assistant Professor of Clinical Gynecology.
- 1918 Benjamin Franklin Lounsbury, B.S., M.D., Assistant Professor of Operative Surgery.
- 1918 Henry Bascom Thomas, B.S., M.D., Assistant Professor of Orthopedic Surgery.
- 1918 Charles Francis Read, B.S., M.D., Assistant Professor of Psychiatry.
- 1910 John Ross Harger, B.S., M.D., Assistant Professor of Surgery.

- 1911 Frank Chauvet, M.D., Assistant Professor of Physical Diagnosis.
- 1914 Karl Albert Meyer, M.D., Assistant Professor of Surgery and Clinical Surgery.
- 1918 Cassius Clay Rogers, A.B., M.D., Assistant Professor of Surgery.
- 1913 Josiah John Moore, B.S., M.D., Assistant Professor of Pathology and Bacteriology.
- 1913 Ernest Sisson Moore, Ph.D., M.D., Assistant Professor of Clinical Medicine.
- 1910 Henry Eugene Irish, M.D., Assistant Professor of Pediatrics.
- 1911 Charles Herbert Phifer, M.D., Assistant Professor of Surgery.
- 1906 Egan Walter Fischmann, M.D., Assistant Professor of Gynecology.
- 1914 Morris Lamm Blatt, M.D., Assistant Professor of Pediatrics.
- 1911 Adolph Hartung, M.D., Assistant Professor of Roentgenology.
- 1919 Walter H. Meents, B.S., M.D., Assistant Professor of Surgery.
- 1919 Ralph Chess Purnell Truitt, M.D., Assistant Professor of Neurology and Psychiatry.

COLLEGE OF DENTISTRY

PROFESSORS

- 1906 Frederick Brown Moorehead,¹¹ A. B., D.D.S., M.D., Professor of Oral Surgery, Pathology and Bacteriology and Dean of the College.
- 1913 Frederick Bogue Noyes, B.S., D.D.S., Professor of Orthodontia and Histology and Secretary of the Faculty.
- 1913 Edgar David Coolidge, D.D.S., Professor of Materia Medica and Therapeutics.
- 1908 Louis Schultz, D.D.S., M.D., Professor of Oral Surgery and Pathology.

¹¹Included *supra* under the Council of Administration

- 1904 Louis E. Bake, D.D.S., Associate Professor of Operative Technics and Porcelain Art.
- 1913 Solomon Perry Starr, D.D.S., Associate Professor of Prosthetic Technics.
- 1913 Frank Joseph Bernard, D.D.S., Assistant Professor of Oral Surgery (Extracting).
- 1914 John C. McGuire, D.D.S., Assistant Professor of Radiography and Superintendent of the Infirmary.
- 1914 William Ira Williams, D.D.S., Assistant Professor of Operative Dentistry.

SCHOOL OF PHARMACY

- 1905 Albert Henry Clark, B.S., Ph.G., Assistant Professor of Chemistry.
- 1912 Bernard Fantus, M.D., Lecturer on Physiology.

RETIREMENT OF PROFESSORS BURRILL AND SHATTUCK

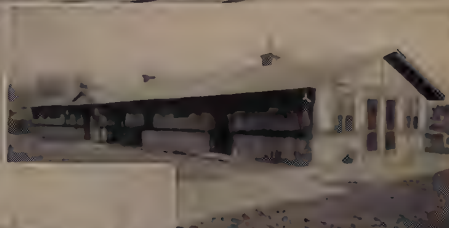
September 1, 1912, Professors T. J. Burrill and S. W. Shattuck, the last two members of the original faculty of the University, became professors emeriti, and retired on Carnegie allowances from active service. Professor Burrill came to the University in 1868 as instructor in algebra, but was soon appointed assistant professor of natural history. He served at various times as professor, vice-president, acting president, dean of the college of science and dean of the graduate school. In spite of his many administrative duties Dr. Burrill was active as an investigator and made a number of scientific discoveries of the first importance.

Professor Shattuck came to the University in 1868 as assistant professor of mathematics and instructor in military tactics. For the next forty-four years he was at various times professor and head of the department of mathematics, acting president, professor of civil engineering, business manager and comptroller. His careful, honest management of the University's finances had no small part in bringing about the steady growth of the institution.

Upon the retirement of Professors Burrill and Shattuck the University Senate presented to each a specially designed gold



Power House



*Isolation Hospital
Annex*



Isolation Hospital



Small Observatory



Store House



Artillery Barns

medal. The formal presentation of the medals occurred at a special University convocation held in honor of the two retiring professors October 16, 1912.

Professor Shattuck died at Urbana, February 13, 1915. Dr. Burrill died at Urbana on the 14th of April, 1916.

RETIREMENT OF PROFESSORS MCINTOSH, RICKER, AND ROLFE

September 1, 1915, marked the retirement of Professor Donald McIntosh, for nearly thirty years Professor of Veterinary Science at the University of Illinois, and at the time of his withdrawal from active work, the oldest member of the College of Agriculture in point of service. He came to the institution in 1885 to give a course of lectures in Veterinary Science. During the following year he was promoted to the grade of Professor and thereafter served as the only instructor in Veterinary Science. His death occurred upon September 5, 1915, just five days after his retirement from active work, and the courses to which he had devoted himself so faithfully during the last thirty years were temporarily withdrawn.

On September 1, 1916, Professor N. C. Ricker was elected professor emeritus and retired upon a Carnegie allowance. Professor Ricker came to the University as a student in 1870. Three years later he was appointed instructor in Architecture and given charge of the department. For the next thirty-seven years he served the University in a number of increasingly important offices; one year instructor in Architecture, one year assistant professor of Architecture, thirty-five years professor of Architecture, and beginning in 1878 for twenty-seven years Dean of the College of Engineering. To this pioneer the University of Illinois owes much, for it was his patient and persistent labor that developed here a Department of Architecture in which the State may take an honest pride.

Entering the University two years earlier and retiring from active service one year later than Professor Ricker, Professor C. W. Rolfe became professor emeritus on September 1, 1917. "He was graduated from the University of Illinois with the degree of B.S. with the class of 1872, having entered in 1868. Beginning as instructor in Mathematics and Botany, he has been

instructor, assistant professor, and professor in the University since 1881. His continuous service has extended over thirty-six years."¹² Today the Department of Ceramic Engineering stands as a monument to the faithful and devoted services of this man, for he, more than any one else, was responsible for initiating and establishing upon a firm foundation the work of this department.

IN THE MATTER OF QUALITY

No other feature of the equipment of a university will so largely determine its strength as will the men who are charged with the direct conduct of its various activities. Abundance of land, numerous and spacious buildings, well equipped laboratories and libraries and large revenues will not singly or all combined insure for a university either strength or progress. In the final analysis it is the personnel of the faculty that will chiefly determine the value of the university to the commonwealth and its rank among its sister institutions of learning.

The increase in the number of the instructional and administrative staff of the University during the past twelve years has been a matter of necessity, in response to a steadily increasing enrolment of students. An increase in the actual strength of the faculty, from the standpoint of scholarship and teaching ability, could, however, come only as a result of the exercise of the greatest care in the selection of individual instructors. Throughout the sixteen years from 1904 to 1920, whether a candidate was to occupy an important or a minor position, thorough consideration has been given to his scholarship, his ability to impart information and to inspire active efforts on the part of his students, his personal character and his own activity as a thinker and a producer of that which would add to the world's store of knowledge. One college of the University after another has been thus strengthened, until at the present time there is probably no department in which the work done is not of a distinctly high grade and no department in which a student may not come under the instruction of one or more of the country's leading scholars in that field of study.

¹²Minutes of Bd. of Trustees, Univ. of Ill., July 17, 1917, p. 414

This policy of selecting only the best men has involved as a necessary prerequisite the willingness to pay somewhat higher salaries than were formerly paid to those occupying similar positions. That the purpose of the governing board of the University to strengthen the faculty by this means has been fully approved by the people of the state is well shown by a joint resolution adopted in 1909 by the Forty-Sixth General Assembly, reading as follows:¹⁸

“Whereas, It is the evident will of the people of this commonwealth that the University of Illinois shall be made so complete in its organization and equipment that no son or daughter of this State shall be obliged to seek in other states or other countries those advantages of higher education which are necessary to the greatest efficiency of social service either in public or private station; and

“Whereas, the State of Illinois has imposed upon this institution, in its agricultural and engineering experiment stations, and in its graduate school, the duty of carrying on extensive and important investigations of vital interest to the agricultural industry and education of the State, and the conduct of these investigations calls for the very highest ability and the most thorough training on the part of those entrusted with their supervision; and

“Whereas, the great progress of this institution in the last five years has attracted the attention of the whole country, and made other institutions desirous of drawing away the members of the faculties in said university; and

“Whereas, the present schedule of salaries is not sufficient to enable the institution to compete on equal grounds with other state and private universities in the United States; therefore be it

“Resolved, By the Senate, the House of Representatives concurring herein, That it is the sense of this General Assembly that the Board of Trustees of the University of Illinois should adopt such a policy as will in their judgment attract to, and retain in, the service of the University and the State, the best available ability of this and other countries.”

¹⁸Laws of Ill., 1909, p. 496

The following tables show the number of persons receiving salaries of various amounts in 1903-04, and the number of those receiving similar salaries in 1919-20. It will be noted that whereas in the earlier year only the president of the University received a salary of more than \$3,800, and only five persons other than he received as much as \$3,000; in 1919-20 one hundred and five persons were receiving \$3,000 or more a year, of whom nine received \$4,000, three \$4,500, sixteen \$5,000, five \$5,500 and five \$6,000 or more. It may be further noted that in 1917-18 approximately 29 per cent of the faculty were receiving salaries of \$2,500 or more, as against 10.3 per cent in 1903-04; 68 per cent were receiving \$1,500 or over, as against 40 per cent in 1903-04; 98 per cent were receiving \$1,000 or more; and 1.6 per cent were receiving less than \$1,000 as against 30 per cent in 1903-4.

SALARIES OF FACULTY 1903-04 AND 1919-20¹

Salary	President		Vice President		Deans, Professors		Associate Professors		Assistant Professors		Associates		Instructors		Assistants	
	1903-04	1919-20	1903-04	1919-20	1903-04	1919-20	1903-04	1919-20	1903-04	1919-20	1903-04	1919-20	1903-04	1919-20	1903-04	1919-20
Over \$6000	1	2														
\$6000		8														
5500		6														
5000		13														
4500		8														
4250		1														
4000		24														
3500-3800	1	35														
3400		3														
3000-3300	4	49												1		
2600-2900	4	31														
2500	8	15														
2250-2400	2	20														
2000-2200	20	10											2	52		
1500-1900	25											2		109		
1200-1400	11											10		61		
1000-1100	2											30		5		
Less than \$1000.....												52		1		

¹The table includes only full-time members of the faculty. Of the library staff only those persons who gave instruction in the Library School are included. Clerks, stenographers and miscellaneous employees of the University are not included.

SUMMARY OF SALARIES 1903-04 AND 1919-20

Salaries	1903-04		1919-20	
	Number	Per Cent	Number	Per Cent
\$6000 or over.....	1	0.6	10	2.0
5500 or over.....	1	0.6	16	3.2
5000 or over.....	1	0.6	29	5.8
4500 or over.....	1	0.6	37	7.4
4000 or over.....	1	0.6	62	12.5
3500 or over.....	2	1.1	97	19.5
3000 or over.....	6	3.4	130	28.2
2500 or over.....	18	10.3	176	35.4
2000 or over.....	42	39.7	282	56.8
1500 or over.....	69	39.7	416	83.8
1000 or over.....	122	70.1	495	99.8
Less than \$1000.....	52	29.9	1	.2

The following table shows the average salaries received by members of the faculty of each rank in 1903-04 and in 1919-20. The average increase was 83 per cent.

AVERAGE SALARIES OF FULL-TIME MEMBERS

	1903-04	1919-20	Increase	% of Increase
Average for Instructional Staff.....	\$1,321	\$2,419	\$1,098	83
Deans ¹	2,871	5,195	2,324	80
Professors.....	2,166	3,847	1,681	77
Associate Professors.....	1,867	2,910	1,043	55
Assistant Professors.....	1,475	2,544	1,069	72
Associates.....	....	2,066	....	..
Instructors.....	978	1,614	978	65
Assistants.....	778	1,306	528	67

Scholarship, teaching ability and personality are elements that cannot easily be represented by statistics. These qualities, however, together with the activity evidenced as an investigator and a writer, form the basis of the judgment passed upon a teacher by his professional brethren in other institutions and by the world at large. Thus, one indication of the growth in

¹No administrative officers of the University other than deans are included in the table

strength in the faculty of the University of Illinois may be seen in the fact that in 1903-05 edition of *Who's Who in America* thirty-four names of members of the faculty of the University were given, and that in the 1918-19 edition of this publication the number had increased to 124—a gain of 90, or 265 per cent for the past sixteen years.

In the first edition of the *American Men of Science*, published in 1906, the names of six members of the faculty of the University of Illinois were starred as being among “the thousand students of the natural and exact sciences in the United States, whose work is supposed to be the most important.” In the four years from 1906 to 1910 the number increased to 17, a gain of nearly 200 per cent. In commenting upon this fact the editor says:¹⁴

“As has been already indicated, Harvard, the Massachusetts Institute of Technology and Yale, in New England, and Chicago, Illinois and Wisconsin, in the north central region have been particularly fortunate in the possession of younger men who have acquired scientific reputation in the course of recent years. The same institutions have been equally happy in not having many men who have lost their positions on the thousand. This double success cannot be attributed to chance, but must indicate skill in the selection of men, or an environment favorable to good work.”

In this connection an extract from the report of the President of the University of Illinois to the State Superintendent of Public Instruction in 1906 will be of interest:¹⁵

“I think it will be generally agreed that the average scholarship, and the experience and efficiency of the younger appointees in all the various faculties have been materially elevated. There is general agreement that we have never had an abler, better trained, or more experienced body of young instructors than are now at work in the University of Illinois. Conditions, of course, are becoming more and more favorable for bringing about such results. With the increase of the student body it becomes necessary to enlarge the instructing corps, and

¹⁴*American Men of Science*, 2nd Edition, 1910, p. 572

¹⁵Ill. School Report, 1904-06, pp. 390-391

with this increasing number of instructors, it becomes possible to secure a wider range of ability and preparation. This makes the University a more interesting place to work, and young men who are looking forward to a scientific career are more willing to come into it and remain a part of the staff for a longer time than would otherwise be the case. As our equipment is increased and as our libraries increase, the University becomes to an increasing extent a center of scientific research and investigation; and life in the University is increasingly attractive to the best type of aspiring, progressive, highly trained scientists.

“Thus, if we have only one or two instructors in the department of mathematics, it is scarcely possible to have more than one or two specialties or lines of investigation represented; but when we have fifteen or twenty, it is possible not only to get men who can do well the elementary and required work in our various courses, but each one of these men can be specially trained in some particular line; so that when we take the whole body of instructors into consideration, all branches of mathematical investigation may be fairly represented. The importance of this possibility in the development of a truly scientific spirit and a truly scientific advance within the institution can scarcely be overestimated. In the same way, if we have only one or two instructors in the field of modern languages, we can hardly have more than one or two lines of work represented by adequately trained scholars, but when we have ten or twelve, it becomes feasible to obtain, in selecting the personnel of such a force, representatives for every line of investigation within the great field of modern philology and literature.

“No institution can lay any claim to the title, ‘university,’ unless it is a center of scientific activity which is spontaneous in the members of its instructing corps—self activity prompted by a divine thirst for increasing our knowledge.

“I have urged upon the faculties and upon the trustees with all the earnestness of which I am capable that in the selection of young men for the position of instructor, that is, the lowest grade of our faculty positions, only those young men should be selected who have it in them to be good teachers, capable instructors and at the same time who have had the proper

training and have within themselves the ambition to become investigators, research men, productive scholars, in the various lines in which they are at work.

“There is no doubt that if this plan is adhered to closely, systematically, continuously, for a generation, the University of Illinois, if the State equips it properly with libraries and apparatus, will become one of the great centers of learning in the world, a credit to the people of the commonwealth, a source of untold advantage to the culture and industry of this great state.

The editor of the *American Men of Science* adds also:¹⁶

“Wisconsin and Illinois are the state universities which have made the most notable progress The gain of almost 200 per cent at Illinois is in the main due to the departments of chemistry and mathematics, to the heads of which the University was so wise as to call men of high scientific standing.”

In 1917, the names of 82 members of the faculty of the University of Illinois were found in the last edition (1910) of that publication, and of these 25 were designated among the thousand “leading men of science.” There has been, therefore, within the last eleven years a gain of 19 names in the representation of the University among the first thousand—an increase of 317 per cent.

BOOKS AND ARTICLES PUBLISHED BY THE CORPS OF INSTRUCTION

During the fifteen years from May 1, 1904 to April 30, 1919, 6,768 books and articles were published by members of the instructional and administrative staff of the University. The table which follows will indicate the number published in each year.¹⁷

During recent years the publications have been listed under four heads, namely: (1) Books; (2) Articles; (3) Book reviews which are essentially original articles or contributions to the subject matter of the book or article reviewed; (4) Book reviews which are of the character of book notices. During the greater part of the period, however, little distinction was made

¹⁶American Men of Science, 1910 ed., p. 588

¹⁷Univ. Studies, Univ. of Ill., 1904-1917

between the various kinds of publications, and for those years the figures given in the "Total" column are the ones of chief importance. During the earlier years "book notices" were generally omitted.

It should be noted that the difference between a "book" and an "article" is in many cases very slight—the distinction resting upon the form in which the contribution appears rather than upon any essential difference in the nature of the subject-matter, in the treatment of the subject, or in the size of the publication.

BOOKS AND ARTICLES PUBLISHED BY MEMBERS OF THE
FACULTY 1904-1919

Year (May 1-April 30)	Books	Articles	Book Reviews	Book Notices	Total
1904-05	20	158			178
1905-06	16	175			191
1906-07	21	221	8		250
1907-08	20	242	3		265
1908-09	18	280			298
1909-10	33	357	9		399
1910-11	38	331	10		379
1911-12	22	341	9		372
1912-13	15	287	15		317
1913-14	30	343	17		390
1914-15	39	475	36	106	656
1915-16	69	669	51	167	956
1916-17	51	493	45	87	676
1917-18	59	564	62	79	764
1918-19	39	542	45	51	677
Total	490	5,478	310	490	6,768

CHAPTER VI.

THE STUDENT BODY

When the University was first opened for the reception of students, March 2, 1868, about fifty¹ persons were enrolled. During the term the number increased to 77. The first full school year, beginning in the fall of 1868, showed a total of 128 students. For the next three years there was a large annual increase in the number of students enrolled, but for the two succeeding years the increase was very slight. A period of fifteen years followed in which the number of students remained practically stationary at about 400, although in 1883-4 as few as 330 were in attendance. In 1888-9 the number enrolled was once more over 400, and from that time there has been almost no year in which the number of students failed to exceed that of the preceding year.

The following table² gives the enrolment for each year since the organization of the University. It will be noted that women were first admitted in 1870-71, and that they have each year represented about one-fifth of the total number of students enrolled.

TOTAL ENROLMENT 1868-1920

Year	Men	Women	Total
1868 (spring)	77	..	77
1868-69.....	128	..	128
1869-70.....	180	..	180
1870-71.....	254	24	278
1871-72.....	328	53	381
1872-73.....	326	74	400
1873-74.....	316	90	406
1874-75.....	285	88	373
1875-76.....	303	83	386
1876-77*.....	296	92	388

¹Extract from Diary of President Gregory, p. 1

²Registrar's Report, Univ. of Ill., September 29, 1913, p. 24; supplemented by the statistics for the years 1914-17

*Figures from 1876-77 to 1910-11 include the preparatory department

Year	Men	Women	Total
1877-78.....	291	86	377
1878-79.....	318	98	416
1879-80.....	322	112	434
1880-81.....	299	80	379
1881-82.....	276	76	352
1882-83.....	290	92	382
1883-84.....	261	69	330
1884-85.....	292	70	362
1885-86.....	269	63	332
1886-87.....	289	54	343
1887-88.....	305	72	377
1888-89.....	346	72	418
1889-90.....	392	77	469
1890-91.....	444	75	519
1891-92.....	494	89	583
1892-93.....	610	104	714
1893-94.....	609	109	718
1894-95.....	673	137	810
1895-96.....	672	183	855
1896-97.....	865	194	1059
1897-98.....	1335	247	1582
1898-99.....	1492	332	1824
1899-1900.....	1747	478	2225
1900-01.....	2038	467	2505
1901-02.....	2334	598	2932
1902-03.....	2560	729	3289
1903-04.....	2872	720	3592
1904-05.....	3012	722	3734
1905-06.....	3266	825	4091
1906-07.....	3402	916	4318
1907-08.....	3752	994	4746
1908-09.....	4013	966	4979
1909-10.....	4118	1000	5118
1910-11*.....	4222	995	5217
1911-12.....	4194	1006	5200

*Figures from 1876-77 to 1910-11 include the preparatory department

Year	Men	Women	Total
1912-13.....	4061	1026	5087
1913-14.....	4347	1192	5539
1914-15.....	4659	1297	5956
1915-16.....	4980	1457	6437
1916-17.....	5187	1641	6828
1917-18.....	3909	1681	5590
1918-19.....	5372	1785	7157
1919-20.....	6947	2261	9208

Two principal causes have been responsible for the large increase in enrolment during the past twenty years. These are, first, the natural growth of the departments already in existence, as the facilities of the University for offering a high grade of instruction have become better known, and as the number and quality of the high schools of the state advanced; and in the second place, the acquisition of additional colleges and schools and the organization of new departments by the University.

Thus, in May, 1896, the Chicago College of Pharmacy, founded in 1859, became the School of Pharmacy of the University of Illinois.³ In 1897 arrangements were concluded for the affiliation of the College of Physicians and Surgeons of Chicago with the University, and the former institution became known as the College of Medicine of the University of Illinois.⁴ In 1901 the property and good will of the Illinois School of Dentistry in Chicago were transferred to the College of Medicine and a School of Dentistry was organized by the University as a department of the College of Medicine.⁵ In 1905 the School of Dentistry became a separate college. The Colleges of Medicine and Dentistry were discontinued on June 30, 1912, but were reopened in 1913 in February and October respectively. In 1897 the School of Library Economy which had been established in 1893 at the Armour Institute of Technology in Chicago was transferred to the University and the Library School of the University was opened.⁶ The first summer session of the University

³Rept., Univ. of Ill., 1896, p. 240

⁴Rept., Univ. of Ill., 1898, p. 74; 1900, p. 247

⁵Rept., Univ. of Ill., 1902, pp. 54-56

⁶Rept., Univ. of Ill., 1898, pp. 111, 192; Univ. of Ill. Bul. Vol. I, No. 4. Oct. 18, 1903, p. 3.

was opened in June, 1894.⁷ In 1897 the department of music was reorganized and made the School of Music with a separate faculty and organization.⁸ The School of Law was organized in 1897. It became the College of Law in 1900.⁹ In 1901 the General Assembly made an appropriation of \$6,000 per annum for the establishment of "a school of social and political science and industrial economics," and in accordance with this action the Courses in Business Administration were organized. In 1915 these were erected into a separate College of Commerce and Business Administration.¹⁰ The School of Education was established in 1905. In 1906 a department of railway engineering was created. In the following year it was reorganized as the School of Railway Engineering and Administration. Graduate work was undertaken as early as 1892. In 1907 the legislature appropriated \$50,000 for each of the next two years for the support of the Graduate School, and the school was definitely organized immediately, with an executive faculty. The College of Literature and Arts and the College of Science were united in 1913 to form the College of Liberal Arts and Sciences.¹¹

It will be noticed that there is a slight decrease in the number of students enrolled in 1911-12, and a larger decrease for 1912-13. The Academy connected with the University was discontinued in June, 1911. During the preceding year 304 students had attended the Academy. This loss more than offset the gain of 287 college students in the year 1911-12. The discontinuance of the College of Dentistry during the year 1912-13, and the consequent loss of the 125 students enrolled in that college, was responsible for the decrease of 113 in the total enrolment of the University for 1912-13.

The enrolment was greatly affected by the entrance of the country into the war, in 1917. The attendance fell from 6,828 in 1916-17 to 5,590 in 1917-18. This loss was offset in 1918-19 by the organization of the Students' Army Training Corps, and the enrolment passed the 7,000 mark for the first time, making a

⁷Rept., Univ. of Ill., 1894, pp. 198, 214, 234, 271.

⁸Rept., Univ. of Ill., 1898, p. 125

⁹Rept., Univ. of Ill., 1898, pp. 44, 72; Univ. of Ill. Register, 1899-1900

¹⁰Rept., Univ. of Ill., 1916, p. 244; Laws of Illinois, 1901, p. 40

¹¹Rept., Univ. of Ill., 1914, p. 71

gain of 28 per cent. This large increase, however, was only the first wave of the flood, for in 1919-20 the total enrolment was 9,249, a gain of 2,092, or over 29 per cent, over the preceding year, and of over 65 per cent over 1917-18. The increase during the sixteen years from 1904 to 1920 was 5,515, or more than 157 per cent. The largest annual increase previous to 1919-20 was 10 per cent, made in 1907-08.

The following table exhibits the growth of each college and school of the University from year to year for the fourteen years from 1904 to 1920, as measured by the enrolment of students in each.¹²

¹²Cf. Registrar's Report, Univ. of Ill., September 29, 1913, pp. 28-31, and subsequent Annual Registers, Univ. of Ill.

Colleges and Schools	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20
LITERATURE AND ARTS.....	585	666	676	774	837	880	862	909	926	1606 ¹	1858	1552	1784	1738	2239	2547
SCIENCE.....	173	183	201	269	297	297	348	393	448	1						
ENGINEERING	863	963	1097	1185	1250	1303	1274	1290	1160	1202	1191	1215	1213	916	1537	1768
AGRICULTURE	349	428	445	483	526	628	712	818	879	982	1186	1230	1173	657	722	1215
MUSIC	80	65	82	72	65	61	85	82	88	80	93	89	108	113	111	119
COMMERCE AND BUSINESS ADMINISTRATION ²												581	739	606	1112	1588
EDUCATION ³																87
TOTAL, undergraduates at Urbana. 2080	2305	2501	2783	2975	3169	3281	3492	3501	3870	4328	4667	5017	4030	5721		7324
LAW	129	148	162	186	180	193	155	122	126	108	106	88	73	46	50	109
LIBRARY SCHOOL.....	41	40	43	48	36	31	41	40	36	42	48	43	45	53	29	34
GRADUATE SCHOOL	126	123	160	206	272	283	316	329	339	331	470	484	477	375	353	380
SUMMER SESSION (gross)	238	423	502	555	664	631	677	647	640	713	935	1028	1147	833	748	1314
SUMMER SESSION (duplication)	106	141	158	193	325	318	373	290	273	298	488	397	481	330	269	614
SUMMER SESSION (net)	132	282	344	362	339	313	304	357	367	415	447	631	666	503	479	700
TOTAL AT URBANA.....	2898	3210	3585	3802	3989	4097	4340	4369	4766	5399	5913	6278	5007	6602		8539
MEDICINE	653	565	505	476	520	526	518	537	551	450	290	226	215	263	281	308
DENTISTRY	154	144	88	76	106	108	140	125	..	89	84	128	182	173	163	196
PHARMACY	150	173	171	259	229	174	158	198	176	255	200	195	161	147	111	209
TOTAL IN CHICAGO.....	957	882	764	811	855	808	816	860	727	794	574	549	558	583	555	713
PREPARATORY	271	327	367	374	339	334	304									
TOTAL IN UNIVERSITY.....	3736	4107	4341	4770	4996	5131	5217	5200	5096	5560	5973	6462	6836	5590	7157	9249
DUPLICATES NOT YET DEDUCTED.....	2	16	23	24	17	13	..	9	21	17	25	8	..	..	..	..
NET TOTAL IN UNIVERSITY.....	3734	4091	4318	4746	4979	5118	5217	5200	5087	5539	5956	6437	6828	5590	7157	9249

¹In 1913 the College of Literature and the College of Science were united to form the College of Liberal Arts and Sciences. The figures given for Literature and Arts for 1913-14 and subsequent years are for the combined college.

²Not organized as a separate college until 1915

³Not organized as a separate college until 1918

The following table presents a comparison between the enrolment in the various colleges, schools and curriculums in 1903-04 and 1919-20.

ENROLMENT BY COLLEGES, SCHOOLS, AND CURRICULUMS,
1903-4 AND 1919-20

College and Curriculum	Enrolment		Increase 1919-20	Per cent of increase
	1903-4	1919-20		
Liberal Arts and Sciences				
General	492	1390	898	182
Journalism	..	147	147	..
Law Preparatory	..	131	131	..
Medical Preparatory	40	179	139	347
Household Science	25	284	259	1036
Chemistry	33	160	127	384
Chemical Engineering	23	256	233	1013
Total	631	2547	1916	303
Engineering				
Architecture	75	120	45	60
Architectural Engineering	43	156	113	262
Ceramic Engineering	..	46	46	..
Civil Engineering	232	351	119	51
Electrical Engineering	172	455	283	164
Mechanical Engineering	219	528	309	141
Mining Engineering	..	61	61	..
Municipal and Sanitary Engineering	8	12	4	50
Railway Civil Engineering	3	10	7	233
Railway Electrical Engineering... ..	..	20	20	..
Railway Mechanical Engineering... ..	..	6	6	..
Gen. Begin. Physics.....	..	3	3	..
Unspecified	34	..	(34) ¹	..
Total	786	1768	982	124
Agriculture				
General	291	1113	822	282
Household Science	17	102	85	500
Total	308	1215	907	294
Music	101	119	18	17
Commerce and Business Administration	41	1588	1547	3773
Education	..	87	87	..
Total, Undergraduates at Urbana.1849		7324	5475	296



Education



Smith Music Building

College and Curriculum	Enrolment		Increase 1919-20	Per cent of increase
	1903-04	1919-20		
Law	142	109	(33) ¹	(23) ¹
Library School	79	34	(45) ¹	(57) ¹
Graduate School	118	380	262	222
Total at Urbana, Winter Session..	2188	7839 ²	5651	258
Summer Session	229	1314	1085	473
Total at Urbana during year.....	2417	9153	6736	278
Medicine (Chicago)	694	308	(386) ¹	(56) ¹
Dentistry (Chicago)	163	196	33	20
Pharmacy (Chicago)	185	209	24	14
Total in Chicago.....	1042	713	(329) ¹	(32) ¹
Preparatory	257	..	(257) ¹	..
Total in University.....	3716	9866	6150	166
Duplicates to be deducted.....	124	617	493	..
NET TOTAL FOR YEAR.....	3592	9249	5657	157

Attention has already been called to the fact that the total gain in enrolment for the past sixteen years was over 157 per cent. From the preceding table it may be observed that several divisions of the University show a much larger increase. Thus, in the business courses, administered under the College of Literature and Arts in 1903-04 but constituting a separate College of Commerce and Business Administration in 1919-20, there was a gain of 3,773 per cent. The enrolment in Household Science, divided between the College of Agriculture and the College of Liberal Arts and Sciences, shows a total gain of 768 per cent. There was a gain of 1,013 per cent in the number enrolled in the curriculum in Chemical Engineering. There was an increase of 473 per cent in the total enrolment in the Summer Session, of 222 per cent in the Graduate School and of 294 per cent in the College of Agriculture.

The divisions showing a loss are the Library School, and the Colleges of Law and Medicine. In the majority of these divisions

¹Decrease

²Deducting 8 duplicates

the loss may properly be attributed to an advancement of the standards required for admission and for graduation.¹⁴

It should be noted that the enrolment for the summer session is not classified in the table according to the divisions of the University. The total figure for the enrolment in various divisions would, of course, be considerably larger if such classification were made. Thus, while the table shows an enrolment of 380 for the Graduate School for 1919-20 for the regular school year, there were 170 graduate students enrolled in the summer session, or a gross total of 550 for the year of 12 months, and a net total of 466, excluding duplicates.

In the following table a summary is presented of the various degrees granted by the University from 1905 to 1919.

¹⁴A statement of the changes in standards is to be found later in this chapter

DEGREES CONFERRED FROM 1905 TO 1919

	1905 ¹	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	Total
Degrees in the Graduate School																
Master of Arts.....	10	16	23	29	61	49	53	46	54	72	69	52	87	52	34	707
Master of Science.....	4	9	6	9	24	24	24	39	53	40	48	53	59	33	18	443
Master of Architecture.....	1	..	..	1	2	2	..	..	..	2	1	..	..	1	..	10
Architectural Engineer.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Civil Engineer.....	1	2	3	1	8	4	8	3	5	4	3	10	8	2	1	63
Electrical Engineer.....	..	..	1	1	3	2	5	1	5	2	3	5	5	1	3	37
Mechanical Engineer.....	4	5	2	..	7	3	4	4	2	..	1	5	2	..	1	40
Mining Engineer.....	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Doctor of Philosophy.....	1	3	1	5	4	12	11	20	20	22	23	33	36	33	18	242
Total, Graduate School.....	21	36	36	46	109	96	105	113	139	142	148	159	197	123	75	1545
Baccalaureate Degrees																
A. B., College of Literature and Arts ²	78	106	110	116	140	138	148	164	137	247	253	228	235	249	227	2576
B. L., College of Literature and Arts	..	..	..	..	..	..	..	..	1	27	2	..	..	1	..	31
A. B., College of Science.....	27	21	22	37	32	36	41	44	66	..	..	..	..	..	..	326
B. S., College of Science ²	..	10	12	13	15	22	17	20	24	26	35	21	33	31	37	316
A. B., College of Commerce.....	..	..	..	..	..	..	..	..	..	..	..	69	73	38	8	188
B. S., College of Commerce.....	..	..	..	..	..	..	..	..	..	..	..	..	3	17	36	56
B. S., College of Engineering.....	96	128	164	131	156	191	202	195	179	228	195	223	218	121	75	2502
B. S., College of Agriculture.....	17	25	44	38	54	49	52	68	95	146	136	189	235	139	65	1352
B. Mus., School of Music.....	1	..	..	1	1	4	1	2	7	5	10	7	9	6	7	61
Total, Baccalaureate Degrees.....	219	290	352	336	398	440	461	493	509	679	631	737	806	602	455	74,408
Degrees in Law																
Bachelor of Laws.....	19	34	19	29	37	34	20	25	23	22	19	21	20	5	..	327
Doctor of Law.....	..	..	..	..	..	3	1	1	3	3	2	4	3	..	..	20
Total, Law	19	34	19	29	37	37	21	26	26	25	21	25	23	5	—	347

¹Statistics for the first five years were compiled from the list of graduates as printed in the Board Minutes for each year. After 1909 figures were taken from tables given in the successive Annual Registers, University of Illinois

²From 1914 on, the figures are for the College of Liberal Arts and Sciences

DEGREES CONFERRED FROM 1905 TO 1919

	1905 ¹	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	Total
Degrees in the Library School																
Bachelor of Library Science.....	20	11	15	13	12	8	13	12	8	5	14	11	10	12	7	171
Total, Colleges and Schools at Urbana	279	371	422	424	556	581	600	644	682	851	814	932	1036	742	537	9471
Degrees in Medicine																
Bachelor of Science.....	..	..	..	..	..	..	..	..	..	..	4	12	39	68	66	189
Doctor of Medicine.....	213	210	147	151	130	130	94	145	130	113	102	109	49	30	48	1801
Total, Medicine	213	210	147	151	130	130	94	145	130	113	106	121	88	98	114	1990
Degrees in Dentistry, Doctor of Dental Surgery.....	70	43	34	29	29	21	48	36	..	30	19	32	38	46	71	542
Degrees in Pharmacy																
Graduate in Pharmacy.....	38	52	30	34	60	52	49	34	33	32	40	39	54	38	12	597
Pharmaceutical Chemist	..	..	..	..	4	2	5	3	3	6	4	2	7	4	4	44
Total, Pharmacy	38	52	30	34	64	54	54	37	36	38	44	41	61	42	16	641
Total, Departments in Chicago.....	321	305	211	214	223	205	196	218	166	181	169	194	187	186	201	3173
Honorary Degrees																
Doctor of Laws.....	14	2	2	3	..	1	1	2	..	..	..	..	..	..	..	25
Doctor of Agriculture.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Doctor of Science.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Doctor of Engineering.....	2	..	..	..	..	2	1	..	..	..	..	..	..	..	..	5
Master of Arts.....	6	..	1	..	..	..	..	..	..	..	..	..	..	..	..	7
Civil Engineer	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Mechanical Engineer	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total, Honorary Degrees.....	27 ^a	2	3	3	..	3	2	2	..	..	..	..	..	..	..	42
Total Degrees Granted.....	627	678	636	641	779	789	798	864	848	1032	983	1126	1223	928	738	12,686

^aReport University of Illinois, 1906, p. 76, 281. Presented at the presidential inauguration in 1905.

In the next table there is presented a comparison of the number of degrees granted in the various colleges and schools of the University in 1904 and in 1918.

DEGREES CONFERRED IN 1904 AND IN 1918

	1904	1918
Degrees in the Graduate School		
Master of Arts.....	10	52
Master of Science.....	2	33
Civil Engineer		2
Master of Architecture.....		1
Electrical Engineer		1
Architectural Engineer		1
Mechanical Engineer	2	
Doctor of Philosophy.....		33
Total	14	123
Baccalaureate Degrees		
A. B., College of Liberal Arts and Sciences.....	120	249
B. S., College of Liberal Arts and Sciences.....		31
B. L., College of Liberal Arts and Sciences.....		1
A. B., College of Commerce and Business Administration...		38
B. S., College of Commerce and Business Administration...		17
B. S., College of Engineering.....	99	121
B. S., College of Agriculture.....	16	139
B. Mus., School of Music.....		6
Total	235	602
Degrees in Law		
LL. B.	39	5
Degrees in Library Science		
B. L. S.	30	12
Total, Colleges and Schools at Urbana.....	318	742
Degrees in Medicine		
B. S.		68
M. D.	216	30
Total	216	98
Degrees in Dentistry		
D. D. S.	56	46

DEGREES CONFERRED IN 1904 AND IN 1918

Degrees in Pharmacy

Ph. G.	43	38
Ph. C.		4
Total	43	42
Total, Departments in Chicago.....	315	186
Total, All Departments.....	633	928

The total number of degrees granted in the undergraduate colleges rose from 235 in 1904 to 602 (779)* in 1918, a gain of 367 (571), or over 156 (243) per cent. The professional schools, on the other hand, all show a loss in the number of degrees conferred. In 1904, 384 degrees were granted in Law, Library Science, Medicine, Dentistry and Pharmacy—over 60 per cent of the entire number granted by the University. In that year the number granted in the Chicago Departments, 315, was only three less than the total number granted in all the departments at Urbana. In 1918 the number of degrees conferred in the professional schools was 203 (220), or less than 22 (18) per cent of the total number conferred by the University in that year. This decrease is due in part to the much higher entrance requirements prevailing during recent years, and in part to the economic fact that the supply of professionally trained men and women is likely to come in response to a demand—real or supposed—for persons so equipped; whereas the student in the undergraduate college chooses his course largely with a view of acquiring a general education, leaving his final choice of a vocation to be made at a later time.

There was a steady increase in the number of degrees granted in the Graduate School during the fourteen years from 1904 to 1918. However, the number of degrees granted to graduate students dropped from 197 in 1917 to 123 in 1918, a loss of 74 or nearly 38 per cent. During the fourteen year period from 1904 to 1918, the total number increased from 14 in 1904 to 123 (197) in 1918, a gain of more than 778 (1,307) per cent. The degrees of Master of Arts and Master of Science were con-

*The figures in parenthesis are those for 1916-17.

ferred on 10 persons and 2 persons, respectively, in 1904, but in 1918 52 (87) persons were granted the degree of A. M. and 33 (59) that of M. S. In 1904 no person was granted the degree of Doctor of Philosophy. In 1918 this degree was conferred on 33 (36) persons. The degree was granted to a total of 241 persons during the fifteen years from 1905 to 1919.

The number of persons receiving the degree of Bachelor of Arts was 249 (235) in 1918 as compared with 120 in 1904. The number of graduates of the College of Engineering increased from 99 to 121 (218), a gain of more than 22 (120) per cent.

A remarkable gain is shown in the number of persons who completed the curriculum of the College of Agriculture. One hundred and thirty-nine (235) persons received the degree of Bachelor of Science in Agriculture in 1918 as against only 16 in 1904, an increase of over 768 (1,368) per cent.

The newly organized College of Commerce and Business Administration presented 69 candidates for the Bachelor of Arts degree in 1916, and 38 (73) in 1918, together with 17 (3) candidates for the degree of Bachelor of Science in the latter year.

The total number of degrees granted by the University increased, with some degree of uniformity, from 633 in 1904, to 928 (1,223) in 1918—a total gain of 295 (590), or about 47 (93) per cent for the fourteen year period. The exceptionally large number of degrees conferred in 1914 is partly to be accounted for by the fact that at the 1914 commencement 45 students of former years who had completed the required amount of work for a degree, but had failed to satisfy the technical requirements in force at that time, were granted the appropriate degrees. If this number be deducted from the total number of degrees conferred in 1914, the number of degrees granted to members of the class of 1914 is 987.

It is perhaps worthy of note that the ratio of the number of degrees granted in 1918 to the total number of persons in attendance during the year 1917-18 is nearly the same as the corresponding ratio in 1904—16.6 (17.9) per cent in 1918 as compared with 17.6 per cent in the earlier year.

In December, 1916, the Board of Trustees approved a recommendation of the University Senate to the effect that thereafter

degrees should be conferred four times a year—in August, October and February as well as in June. In consequence of this action a student who completes his work at the end of a summer session or at the end of the first semester is not required to wait until the following June for his degree.¹⁵ Thirteen degrees were conferred in February, 1917, 11 in August and 37 in October in accordance with this provision. Such graduates are ranked as members of the class of the calendar year in which their degrees are conferred.¹⁶

In the four tables which follow, the distribution of degrees conferred in 1904 and in 1918, according to the place of residence of the recipients is indicated.

GEOGRAPHICAL DISTRIBUTION OF DEGREES GRANTED IN
1904 AND IN 1918

	Departments in Urbana		Departments in Chicago		Total	
	1904	1918	1904	1918	1904	1918
Illinois	272	522	175	108	447	630
States other than Illinois	44	190	135	68	179	258
Insular Possessions of the U. S.	..	1	..	..	..	1
Foreign Countries	2	29	5	10	7	39
Total	318	742	315	186	633	928

PERCENTAGE OF DEGREES GRANTED TO STUDENTS FROM
ILLINOIS AND FROM OTHER STATES OR COUNTRIES
IN 1904 AND IN 1918

DEPARTMENTS IN URBANA

	1904	1918
Illinois	85%	70%
States other than Illinois	14	26
Insular possessions of the U. S.	..	..
Foreign Countries	1	4
	100	100

¹⁵Min., Bd. of Trustees, Univ. of Ill., 1916-18, p. 181

¹⁶The degrees granted in February, August and October, 1917 are included in the tables above with the other degrees conferred in that year

DEPARTMENTS IN CHICAGO

	1904	1918
Illinois	55%	58%
States other than Illinois	43	37
Insular possessions of the U. S.	..	..
Foreign Countries	2	5
	100	100

ALL DEPARTMENTS OF THE UNIVERSITY

	1904	1918
Illinois	71%	68%
States other than Illinois	28	28
Insular possessions of the U. S.	..	..
Foreign Countries	1	4
	100	100

A number of facts of interest may be deduced from the preceding tables. There has been a noteworthy increase in the number of students from other states and countries who have received degrees in the Urbana departments of the University. In 1904, 85 per cent of the students graduating from the various departments at Urbana were from Illinois, only 14 per cent from outside states and 1 per cent from foreign countries. In 1918, 26 (25) per cent of the graduates were from other states and 4 (4) per cent from foreign countries. Of degrees granted to graduates of Chicago departments in 1904, but 2 per cent were received by foreign students, while in 1918, 10 (9) degrees, or 5 (5) per cent were received by students from foreign countries. Of the total number of degrees conferred by the University in 1918, 298 (371), or 32 (31) per cent, were granted to students from other states or countries, as against 186, or 29 per cent in 1904.

The extent to which certain departments attracted and held students from other states and from foreign countries may be seen from the fact that in 1917, 16 out of 26 bachelor's degrees granted in architecture, 11 out of the 31 in architectural engineering, and 6 out of 10 in the Library School were conferred on students from states other than Illinois. Of 10 bachelors'

degrees in railway engineering, four were granted to students of other states and two to students from foreign countries. In the College of Commerce, 17 of the 76 bachelors' degrees granted were conferred on students from other states, and 5 on students from foreign countries.

Of the 188 degrees granted by the Graduate School in 1917, only 88 were received by students from Illinois, while 100 degrees were given to students from other states, from our insular possessions, or from foreign countries. In the departments of botany, chemistry, classics, economics, mathematics, German, political science, Romance languages, transportation, zoology, animal husbandry, dairy husbandry, civil engineering, theoretical and applied mechanics and mechanical engineering, half or over half of the advanced degrees granted were conferred on students not living in Illinois. In entomology, philosophy, bacteriology and railway engineering, all the higher degrees were received by students from other states or from foreign countries.

It is evident from these figures that the work of the University of Illinois has become favorably known beyond the borders of the state during the past sixteen years. This fact is shown even more clearly by the total enrolment of students at the University during the year 1917-18, as presented in the following table:

GEOGRAPHICAL DISTRIBUTION OF STUDENTS
1917-18

	Urbana	Chicago	Total
Illinois	3,756	367	4,123
States other than Illinois	1,113	198	1,311
Insular possessions of the U. S.	12	3	15
Foreign Countries	126	15	141
Total	5,007	583	5,590

From the foregoing table it may be noted that 1,467 students, or over 26 per cent of the total enrolment in the University for the year 1917-18, were from outside the state; and

that of these, 141 came to the institution from foreign countries and 15 from the insular possessions of the United States.

Thirty-one foreign countries and four of the insular possessions of the United States were represented at the University during the year 1917-18 by one or more students each. For several years the University of Illinois has provided an Adviser* to Foreign Students to assist them in the solution of their special problems and to facilitate the adjustment of their previous educational work with the courses offered at the University. It is worthy of note, that the success which had attended this work at the University of Illinois has resulted in the adoption of the plan by a number of other leading universities.

The following tables exhibit the attendance of foreign students at the University of Illinois.

FOREIGN COUNTRIES REPRESENTED BY STUDENTS IN THE
UNIVERSITY OF ILLINOIS

1917-18

Country	No. of Students	Country	No. of Students
China	37	Germany	2
Japan	21	Nova Scotia	2
Brazil	13	Austria	1
India	11	Jamaica	1
Canada	10	San Domingo	1
Mexico	5	Italy	1
Greece	4	Hungary	1
Bulgaria	4	Syria	1
Peru	4	Trinidad	1
Spain	3	Argentina	1
Chile	3	Burmah	1
Russia	2	Denmark	1
Norway	2	Colombia	1
Cuba	2	Servia	1
Holland	2	Hayti	1
		Ireland	1

Total from Foreign Countries.....141

*Title changed to Assistant Dean of Men for Foreign Students, 1918

INSULAR POSSESSIONS OF THE UNITED STATES
(Including Canal Zone)

REPRESENTED BY STUDENTS, 1917-18

Country	No. of Students	Country	No. of Students
Hawaii	5	Porto Rico	2
Philippines	7	Canal Zone	1
Total	15		

ATTENDANCE OF INDIVIDUAL STUDENTS IN SUCCESSIVE YEARS

The following table is of interest as indicating the extent to which students drop out of college before the completion of their courses.¹⁷ Although the figures shown are for but a single year, the number of students involved is sufficiently large to make it probable that the percentages found represent fairly the facts relating to the attendance of students in any two successive years.

THE UNDERGRADUATE COLLEGES, THE SCHOOL OF MUSIC
AND THE COLLEGE OF LAW

PERCENTAGES OF STUDENTS GRADUATED, RETURNED, NOT RETURNED
(Students of 1911-12)

	Total 1911-	Grad- uated	June 1912	Returned 1912		Not Ret'd 1912	
	No.	No.	Pet.	No.	Pet.	No.	Pet.
Colleges and Schools	12						
Literature and Arts	909	164	18.0	501	55.1	244	26.9
Science	393	64	16.3	256	65.1	73	18.6
Engineering	1,290	195	15.1	661	51.2	434	33.7
Agriculture	818	68	8.3	485	59.2	265	32.5
Music	82	2	2.5	47	57.3	33	40.2
Law	122	26	21.3	84	68.8	12	9.9
Totals	3,614	519	14.4	2,034	56.2	1,061 ¹⁷	29.4

It will be noticed that there is a considerable difference in the case of the various colleges in the proportion of students who leave before completing their work, ranging from less than ten per cent for the College of Law to over forty per cent for the School of Music.

¹⁷From Report of Registrar, Univ. of Ill., September 29, 1913, p. 22

OCCUPATIONS OF PARENTS OF STUDENTS

From the following table it will be seen that the student body of the University is composed of young men and young women whose parents are engaged in occupations of the most varied character.¹⁸ Here again the figures presented are for a single year, 1912-13, but it is not probable that the year upon which the study was made was exceptional in the facts pertaining to the occupations followed by the parents of the students of this University.

OCCUPATIONS OF STUDENTS' PARENTS AND GUARDIANS—

UNDERGRADUATE STUDENTS AT URBANA, 1912-13

	L. A. & S.	Eng.	Agr.	Music	Law	Li- brary	Total
Professions (the ministry, medicine, the law, teaching, the army and navy).....	204	99	98	17	27	4	449
Scientific Professions (ceramists, chemists, engineers, etc.)	45	71	18	..	4	2	140
Artistic Professions (architects, artists, authors, etc.)	9	23	8	..	..	1	41
Government Service (United States, state, county, city)	41	37	18	1	4	1	102
Business							
Manufacturing	53	57	12	1	6	..	129
Mercantile	300	228	117	17	15	3	680
Business Managers	50	75	27	4	6	..	162
Financial and semi-legal (abstracter, banker, broker, cashier, real estate dealer, etc.)	87	83	58	10	11	2	251
Railroading	35	35	16	2	4	1	93
Agriculturists	301	142	409	20	27	10	909
Skilled Laborers	76	120	35	6	6	1	244
Unskilled Laborers	27	43	14	1	6	1	92
Miscellaneous	73	71	36	4	2	3	189
Retired or "no occupation"	20	18	7	..	2	2	49
Occupation not given.....	53	58	6	5	6	5	133
Total	1,374	1,160	879	88	126	36	3,663

¹⁸Report of Registrar, Univ. of Ill., September 29, 1913, p. 78

It is perhaps worthy of note that the largest number of young men and young women were from the farm, and that next in order are the sons and the daughters of men engaged in merchantile business, the professions, financial and semi-legal business, and as skilled laborers. The wide range of occupations makes it clear that the University is an institution of the whole state, serving all classes of its citizens.

ENTRANCE REQUIREMENTS

In the course of the past sixteen years the requirements for admission have been raised in the case of each of the various colleges and schools of the University.¹⁹ The following table with the accompanying notes indicates the extent to which the requirements have been advanced in each instance.

The changes made in the last sixteen years in the requirements for entrance to the University may be summarized as follows:

For admission to the colleges of Liberal Arts and Sciences, Engineering and Agriculture, and the School of Music fifteen units are now required, as against thirteen and one-third units required in 1904.

The requirements for admission to the College of Commerce and Business Administration, organized as a separate college in 1915, have from the outset been 15 units.

For admission to the College of Law $13\frac{1}{3}$ units were required in 1904. At the present time, in addition to 15 entrance units, two years of college work are required for entrance to the three-year course, and one year of college work for entrance to the four-year course.

Three years of college work were required in 1904 and until 1911 for admission to the Library School. Since 1911 the possession of a bachelor's degree has been necessary to secure admission as a candidate for the degree in library science.

In 1904, $13\frac{1}{3}$ units were required for entrance to the College of Medicine. For 1913-14, 15 entrance units and the completion

¹⁹Cf. Univ. of Ill. Annual Register, 1904 to 1917; Repts., Univ. of Ill., 1904 to 1916; Min., Bd. of Trustees, Univ. of Ill., 1916-18

ENTRANCE REQUIREMENTS 1904-1920

UNITS REQUIRED FOR ADMISSION TO THE VARIOUS COLLEGES AND SCHOOLS OF THE UNIVERSITY

Year	Music L.A.&S. Eng'g Agric. Com. ⁴	Law	Library School	Medi- cine	Dentistry	Pharmacy	
						Ph. G. Curricu- lum	Ph. C. Curri- culum
1904-5	13½	13½	98 hrs. col. credits	13½	1 yr. h. s.	gram.sch. course	4
1905-6	14	14	98 hrs. col. credits	14	2 yrs. h. s.	gram.sch. course	..
1906-7	14	14	98 hrs. col. credits	14	h. s. course	gram.sch. course	..
1907-8	14	14 ¹	98 hrs. col. credits	14	h. s. course	gram.sch. course	..
1908-9	15	15 ²	98 hrs. col. credits	15	15	1 yr. h. s.	15
1909-10	15	15 ²	98 hrs. col. credits	15	15	1 yr. h. s.	15
1910-11	15	15 ²	98 hrs. col. credits	15	15	1 yr. h. s.	15
1911-12	15	1 yr. college	Bachelor's degree	15	15	1 yr. h. s.	15
1912-13	15	1 yr. college	Bachelor's degree	15	— ⁵	1 yr. h. s.	15
1913-14	15	1 yr. college	Bachelor's degree	1 yr. col.	15	1 yr. h. s.	15
1914-15	15	1 yr. college	Bachelor's degree	2 yrs. col.	15	2 yrs. ac. h. s.	15
1915-16	15	2 yrs. college	Bachelor's degree	2 yrs. col.	15	2 yrs. ac. h. s.	15
1916-17	15	2 yrs. college	Bachelor's degree	2 yrs. col.	15	15	15
1917-18 ³	15	1 or 2 yrs. college ⁴	Bachelor's degree	2 yrs. col.	15	15	15

¹After the first of September, 1907, the degree of LL.B. will be conferred only upon students, who, before the academic year in which they receive it, have satisfactorily completed a full year's work in the College of Literature and Arts or the College of Science, or in the corresponding department of another university or college of recognized standing, or to students who have attained in the course which they present for the

of one year of college work were required. Since 1914-15, two years of college work have been prerequisite.

The entrance requirements for the College of Dentistry have advanced from one year of high school work to a credit of 15 units.

In 1904 only the completion of a grammar school course was required for admission to the School of Pharmacy. From 1908 to 1913, one year of high school work was required for enrolment as a candidate for the degree of Graduate of Pharmacy. For 1914-15 the requirements for entrance to the curriculum leading to that degree were fixed as two years' work in an accredited high school. Since 1916, 15 units have been required. For admission to the curriculum leading to the degree of Pharmaceutical Chemist, 15 units have been required since the organization of this curriculum in 1908.

degree an average grade of 85 on the scale of 100."—Register, Univ. of Ill., 1906-07, p. 167.

²The above paragraph (note 1) is stated more explicitly in the announcements published the next year, as follows: "Candidates for the degree of Bachelor of Laws who register in the College of Law after February 1, 1908, in addition to the above law credits, will be required to present credits for one full year's work in the College of Literature and Arts or the College of Science, or the corresponding department of another University or college of recognized standing; or attain in the law courses which they present for the degree an average grade of 85 on the scale of 100. This rule does not apply to members of the Illinois Bar who are admitted to the third year class and may receive the degree of Bachelor of Laws upon satisfactory completion of the work of that year."—Register, Univ. of Ill., 1907-08, p. 171.

These provisions appear also in the Registers for 1908-09 (p. 177) and 1909-10 (p. 206).

³The requirements for 1919-20 were the same as for 1917-18.

⁴On June 7, 1917, the Board of Trustees adopted a recommendation of the University Senate, that in addition to the present three-year curriculum in law, with the admission requirement of sixty hours of college credit, a four-year curriculum in law be established: the admission requirements of the four-year curriculum to be matriculation and thirty hours' credit in a college of this University, or the equivalent. On June 25, a second recommendation was adopted, that students transferring from other institutions who may fall short not to exceed five hours of credit by transfer may be admitted to the three-year curriculum as conditioned students; such conditions to be made up before the beginning of the student's second year in the college.—Min. Board of Trustees, Univ. of Ill., 1916-18, pp. 336, 390.

⁵The College of Commerce was not organized as a separate college until 1915. The curriculum leading to the degree of Pharmaceutical Chemist was not established until 1908. The College of Dentistry was not operated during the year 1912-13.



Woman's Building'



Woman's Residence Hall



Woman's Building, Original Wing

The state law providing for the organization of the University stipulated that no student should be admitted to instruction in any of the departments of the University who should not have attained to the age of 15 years.²⁰ On March 13, 1894, in accordance with a recommendation of the faculty, transmitted to the Board of Trustees by Acting President Burrill, and a favorable recommendation of the Board's committee on instruction, the Board voted that no person under 16 years of age should thereafter be admitted to the University.²¹ In addition to this regulation, which is still in effect, further restrictions have been placed upon prospective matriculants in certain departments of the University.

The College of Law, from its organization in 1897²² until 1911 admitted only students who were at least 18 years of age. Since 1911, when a year of college work was added to the requirements for admission to that college, the minimum age limit of 18 years has been removed.

The College of Dentistry has since 1913 admitted only students 18 years of age or over. Thruout the period since its organization as a department of the University of Illinois; that is, since 1901, it has conferred the degree of D.D.S. only upon students who were at least 21 years of age. Inasmuch as the course in the College of Dentistry covers three years' work, this requirement is practically, though not absolutely, equivalent to a minimum of 18 years for admission.

From 1897 to 1905 the College of Medicine required a minimum of 21 years for eligibility for a degree from that college, but this requirement has not since been made.

From 1896 to 1906 a minimum of 16 years of age was required for entrance to the School of Pharmacy. In 1907 the minimum was raised to 17 years. The degree of Graduate in Pharmacy is given only to candidates who have attained the age of 21 years. Students who complete the curriculum leading to this degree at an earlier age are granted the degree upon their reaching the age required.

²⁰Rept., Univ. of Ill., 1869, p. 7, sec. 8

²¹Rept., Univ. of Ill., 1894, pp. 220, 229

²²Cf. Univ. of Ill. Register 1897-98, p. 142

CHAPTER VII

STUDENT ORGANIZATIONS AND ACTIVITIES

Within recent years the growth in numbers of the student body has resulted in a wider range of interests and a marked increase in the number and variety of student organizations. A history of sixteen years of a university's existence would be incomplete without an attempt to enumerate at least a part of the many outside interests which add to the complexity of student life at a large institution.

It should be observed that a considerable part of such activities are closely related to the daily required work of the student. Thus athletic contests, whether between classes or between different institutions, are in the nature of either a physical training drill or a test of the extent to which the competing athletes have developed by following the required rules of physical training. Inter-collegiate debates and oratorical contests likewise give some evidence of the faithfulness with which the contestants have applied themselves to courses in public speaking, logic, English, sociology, political science, history, and in other fields.

Of the various organizations, some result from the desire of a number of persons having a common interest to unite for the purpose of informal discussion and study in a particular field. Others, especially the fraternities and sororities, are a natural development from the earlier informal groups which boarded at the same table or found rooms under the same roof.

CLASSES OF ORGANIZATIONS

The student organizations are of various kinds, societies of a social nature being perhaps the most numerous. Others may be classified as athletic, literary and scientific, dramatic, musical, religious, honorary and professional, national and sectional, general and miscellaneous. The purposes of many of these societies are, however, broader than this classification would suggest.

LITERARY AND SCIENTIFIC

Of the organizations formed for literary purposes the most comprehensive are the Adelpheic, Philomathean and Ionian societies for men and the Alethenai, Illiola, Athenian, Gregorian and Jamesonian for women. These meet weekly for programs which include oratory, debates, declamations, extemporaneous speaking, and music. Each of the men's societies, in conjunction with one of the women's societies, presents a play annually. The Star Course, a series of entertainments including addresses, concerts and dramatic performances, is conducted under the direction of the Adelpheic and Philomathean societies. Of the eight societies mentioned, four—the Ionian, Athenian, Gregorian and Jamesonian—were organized during the last sixteen years.

Among the societies organized by students for literary and scientific purposes are to be included a considerable number which have been established in the different colleges of the University to carry on outside work of a literary, scientific, or technical nature auxiliary to the work of various departments of that college. Among these are the following:¹

In the College of Liberal Arts and Sciences: The Botanical Club, the Celtic Club, *le Cercle Francais*, *el Circulo Espanol*, the Chemical Club, the University of Illinois Section of the American Chemical Society, the Classical Club, *der Deutsche Verein*, the English Journal Club, the Geological Journal Club, Hexapoeia, the History Club, the Mathematical Club, the Oratorical Association, the Pen and Brush Club, the Philological Club, the Political Science Club, the Psychology Club, the Romance Journal Club, Heimskringla (Scandinavian), the Zoology Club, the Ben Franklin Club.

In the College of Commerce and Business Administration: The Commercial Club.

In the College of Engineering: The Architectural Club, the Ceramics Engineering Society, the Student Branch of the Civil Engineering Society, the Electrical Engineering Society, the Urbana Section of the American Institute of Electrical

¹Univ. of Ill. Annual Register, 1919-20, p. 101

Engineers, the Student Branch of the American Society of Mechanical Engineers, the Student Branch of the American Institute of Mining Engineers, the Physics Colloquium, the Railway Club.

In the College of Agriculture: The Agricultural Club, the Horticultural Club, the Household Science Club, the Landscape Gardeners' Club, the Hoof and Horn Club, the Soils Research Club.

In the College of Law: Inns of Court.

In the School of Music: The University Choral and Orchestral Society, the University Glee and Mandolin Club, the University Military Band, the University Women's Glee Club, the University Choristers.

In the Graduate School: The Graduate Club.

In the Library School: The Library Club.

Of the organizations auxiliary to the courses of study, about half were formed prior to 1904 and the others since that year. Many of the organizations which were in existence in 1904 have shown a marked growth during this period. Noteworthy among these is the Military Band, which consisted of 39 men in 1904. In 1917 the total enrolment of the First Regiment Band, the Second Regiment Band, the reserve band, and the trumpet corps was over 205.

RELIGIOUS

Leadership in the religious activities of the University is taken by the Young Men's and the Young Women's Christian Associations. During the last sixteen years each has erected a substantial building with dormitories, parlors, game rooms, libraries, cafeteria and dining rooms, assembly rooms, etc. The membership of the Young Men's Christian Association showed a marked increase during this period, the maximum number of members being enrolled in 1913-14. In that year the Association had 1,066 members, said to be the largest paid membership of any Student Young Men's Christian Association in the world. During the same period the membership of the Young Women's Christian Association increased from 360 to 516. In 1916-17

there were 473 young women enrolled in voluntary Bible study classes and 75 in the study of missions and social service.

Within recent years ten leading religious denominations have made special efforts to provide facilities for the accommodation of the students of the University. The majority of these employ one or more student pastors and have either already erected or are planning to erect student churches in the immediate vicinity of the University. In addition, the Episcopal, Presbyterian, Congregational and Christian Churches maintain each a dormitory for the accommodation of young women. In connection with the Trinity Methodist Church a group of buildings to cost \$500,000 is being erected by the Methodists of the state to serve as a social and religious center for all students of this denomination.

The Bushnell Guild of the Congregational Church, the Bethany Circle of the Christian Church, the Christian Science Society, and the Seymour League (Episcopalian), all of recent origin, are four of a large number of young people's religious societies the membership of which is chiefly made up of students of the University. The Geneva Club is composed of those who have been in attendance at the Geneva Y. W. C. A. Conferences. The Catholic Students' Association is made up of students of the Roman Catholic faith. The Student Volunteers at the University are regularly enrolled in the Student Volunteer Band. The Menorah Society is a local branch of the National Menorah Society, an organization of Jewish students having for its aim the study of Hebrew ideals, history and culture.

DRAMATIC

Three student organizations now exist at the University for the purpose of fostering dramatic interests, namely the Mask and Bauble Club, the Pierrots, and the Illinois Drama Federation. All of these have been founded during the last sixteen years. The first two named plan to present one or more plays annually. The third organization is active in promoting and correlating the various dramatic interests at the University, and seeks especially to bring about the ultimate erection of a

campus theater. Also the literary societies for many years presented a play. Various programs are given by other organizations in the course of each year, such as the Post Exam Jubilee and the Girls' Stunt Show, consisting of a series of farces or similarly improvised dramatic sketches.

ATHLETIC

The athletic interests of the University are cared for by the Athletic Association, a mixed faculty and student organization. The real power of the Association rests with its Board of Control, consisting of three members of the faculty, three alumni who are not members of the corps of instruction, the director of athletics, and the regular officers of the Association, namely, the president, secretary-treasurer, and the managers of the football, track and baseball teams.

For the last few years vigorous attempts have been made to promote athletic activity among the entire student body. The movement has met with increasing success due to a greater interest in inter-class, inter-society and inter-fraternity contests, or briefly intra-mural athletics. However, the most notable progress was made in the spring of 1918, when the coaching staff of the University of Illinois introduced a new form of intercollegiate competition known as mass athletics. The first contest was held on May 25, and was participated in by Iowa, Wisconsin, Minnesota, Notre Dame and Illinois. Each school conducted its own athletic meet upon the home field and under the direction of local officials. All bona fide undergraduate students, regardless of academic standing, were eligible to compete in any or all events, and a system of scoring was devised whereby each competitor's efforts counted toward the mass score of the institution no matter how poor his performance might be. This new form of activity promises to develop in a more extensive way than ever before the competitive instinct and to insure a more universal participation in intercollegiate athletics by the entire student body. In the year 1919-20, regular schedules were maintained in baseball, basket-ball, track, football, and swimming. The numbers taking part in these

different sports were as follows: Basket-ball 530, baseball 500, track 400, football 75, and swimming 300.

Intercollegiate competition is maintained with each of the other universities of the Western Conference, namely, Chicago, Indiana, Iowa, Michigan, Minnesota, Northwestern, Ohio, Purdue and Wisconsin. Practise games are held annually with smaller colleges also. It is the general belief at the University of Illinois that intercollegiate athletics can be maintained without interference with the intellectual interests of the general student body; while so far as the contestants themselves are concerned, whatever has been acquired in the way of physical powers and moral training finds its surest test in the intercollegiate game.

Illinois athletes made an enviable record during the years from 1904 to 1920. Of 116 football games played, Illinois won 82, lost 26 and tied in 8. In 1910 Illinois not only won every game played but was not scored on thruout the season. Illinois won the Conference football championship in 1910, 1914, 1918, and 1919, and tied for first place with Minnesota in 1915. From 1905 to 1920, 221 games of baseball were played, of which Illinois won 161 and lost 55, while five games resulted in a tie. The Conference championship in baseball was won by Illinois in 1907, 1908, 1910, 1911, 1914, 1915, and 1916, and in 1909 Illinois tied with Purdue for the championship. Of 214 games of basket-ball played, Illinois won 128 and lost 86. In the season of 1914-15 Illinois won the Conference championship in basket-ball, not losing a game. Illinois tied with Northwestern for second place in 1916, and with Minnesota for the Conference championship in 1917. Illinois track teams won 37 outdoor dual meets from 1905 to 1920, losing 7 and tying 1. They won 26 indoor dual meets, lost 6 and tied 1. They won the Conference outdoor meet four times, and in two other years led the Conference universities when an outside team won first place. Of 9 Conference indoor meets held, Illinois won 4 and lost another by one-fourth of a point. Illinois teams won the St. Louis annual meet in 1909, the one-mile championship of America in the Pennsylvania Relay Races in 1913, the two-mile championship of America in the same series in 1914, the

one-mile relay in the Missouri Valley Conference in 1913, first place in the Drake Relay Meet in 1914, and the mile relay in the First Regiment Interscholastic Relay Races in Chicago in 1914.

The activity of Illinois athletes in other branches of sports is deserving of mention. Swimming and water polo teams have been maintained for several years. In 1913 the Illinois swimming team defeated Chicago and Wisconsin in dual meets and also won the Conference championship. A gymnasium team, a wrestling team, a fencing team, a tennis team and a golf team are all maintained and all have won honors for Illinois in inter-collegiate contests. In the Conference fencing meet in 1914, Illinois not only won the championship, but won first place in every event.

A Women's Athletic Association exists at the University, membership in which is secured by winning a certain number of points in physical training courses and athletic activities. The sports promoted by the Association include archery, tennis, hockey, basketball, volley ball, German ball, baseball, quoits and swimming.

FRATERNITIES AND SORORITIES

In 1904, 12 national Greek letter social fraternities for men were represented by chapters in the Urbana departments of the University of Illinois. In 1920 the number had increased to 39. During the same period the number of national sororities increased from 5 to 14. In addition to these organizations there are several local fraternities and sororities and a number of professional and honorary Greek letter fraternities whose objects are to some extent social in nature.

The various social organizations at the University of Illinois are as follows:

National social fraternities: at Urbana-Champaign—Delta Tau Delta, Sigma Chi, Kappa Sigma, Phi Kappa Sigma, Phi Delta Theta, Alpha Tau Omega, Phi Gamma Delta, Sigma Alpha Epsilon, Beta Theta Pi, Sigma Nu, Phi Kappa Psi, Delta Kappa Epsilon, Delta Upsilon, Acacia, Theta Delta Chi, Sigma Pi, Alpha Sigma Phi, Zeta Psi, Phi Sigma Kappa, Psi Upsilon, Alpha Delta Phi, Tau Kappa Epsilon, Phi Kappa, Chi Phi,

Chi Psi, Zeta Beta Tau, Lambda Chi Alpha, Beta Phi, Theta Chi, Alpha Chi Rho, Phi Kappa Tau, Kappa Alpha Psi, Pi Kappa Alpha, Sigma Phi Epsilon, Alpha Gamma Rho, Alpha Kappa Psi, Alpha Phi Alpha, Theta Delta Sigma, Phi Kappa Tau, Pi Kappa Alpha, Sigma Alpha Mu, Sigma Phi Epsilon, Sigma Phi Sigma, Delta Phi; at Chicago—Nu Sigma Nu, Phi Rho Sigma, Alpha Kappa Kappa, Phi Beta Pi, Kappa Psi, Delta Sigma Delta, Psi Omega, Xi Psi Phi.

National sororities: Kappa Alpha Theta, Pi Beta Phi, Kappa Kappa Gamma, Alpha Chi Omega, Chi Omega, Alpha Xi Delta, Sigma Kappa, Delta Gamma, Alpha Omicron Pi, Achoth, Alpha Delta Pi, Gamma Phi Beta, Alpha Gamma Delta, Delta Alpha Omega.

Local social fraternities: Chi Beta, Ilus, Acanthus, Beta Upsilon, Pi Pi Rho, Beta Pi, Anubis.

Local social sororities: Chi Theta.

Inter-fraternity organizations: Pan Hellenic Council (men), Pan Hellenic Association (women), Skull and Crescent (sophomore men), Yo Ma (sophomore women), Ku Klux Klan (junior men).

Colored men's fraternities, national: Kappa Alpha Psi, Alpha Phi Alpha.

Colored women's sorority, national: Alpha Kappa Alpha.

HONORARY AND PROFESSIONAL

A considerable number of Honorary and Professional Societies exist at the University of Illinois, having for their object the recognition and encouragement of high scholarship.

A certain number of the members standing highest in scholarship of the senior class and from four to six members of the junior class in the College of Liberal Arts and Sciences are each year elected to membership in Phi Beta Kappa. Similarly members of the senior class and graduate students who give promise of marked ability in scientific investigation are elected annually to membership in Sigma Xi.

Other Honorary and Professional societies, more limited in scope than the two foregoing, are: Phi Lambda Upsilon, Chemistry; Tau Beta Pi, Engineering; Phi Delta Phi, Law; Alpha

Zeta, Agriculture; Eta Kappa Nu, Electrical Engineering; Order of Coif, Law; Phi Alpha Delta, Law; Delta Sigma Rho, Oratorical; Triangle, Civil Engineering; Alpha Gamma Rho, Agriculture; Alpha Chi Sigma, Chemistry; Gamma Alpha, Scientific; Scarab, Architectural; Beta Gamma Sigma, Commercial; Sigma Delta Chi, Journalistic; Arcus, Architectural; Mu Kappa Alpha, Musical; Alpha Kappa Psi, Commercial; Sigma Tau, Engineering; Alpha Delta Sigma, Advertising; Farm House, Agricultural; Omicron Nu, Household Science; Graphomen, Journalistic; U. L. A. S., Landscape Gardening; Keramos, Ceramics; Psi Mu, Architectural; Medui, pre-Medical; Pi Tau Sigma, Mechanical Engineering; Phi Delta Kappa, Educational; Alpha Rho Chi, Architectural; Gargoyle, Architectural; Theta Tau, Engineering; Alpha Theta Chi, Chemistry; Phi Eta, Graduate; Matrix, Journalistic; Scabbard and Blade, Military; Kappa Delta Chi, Educational.

To this list should be added Alpha Omega Alpha, Sigma Mu Rho, Medical; Mawanda, men's honorary senior society; Phi Delta Psi, women's honorary senior society; Sachem, men's junior society; Tribe of Illini, "I" men; Comitatus, Democratic Club; and Lambda Epsilon Phi, Republican Club.

NATIONAL AND STATE

Among clubs based upon national, state or sectional interests are to be included the Chinese Students' Club, Japanese, Latino-American, Polonia (Polish), Nalanda (Hindustani), Dixie, Easterners, Egyptian, Normal, Arkansas, Kansas, Culver, Shomeez (inter-fraternity Missouri Club), H. H. (Indiana), North Atlantic and the Cosmopolitan Club (an organization of foreign students of various nationalities).

MISCELLANEOUS

There remains a number of societies existing for various purposes.² The Alumni Association maintains an office at the University and publishes the Alumni Quarterly and Fortnightly Notes. The Students' Union, organized in 1909, has for its purpose the promotion of college spirit and the development

²Cf. Univ. of Ill. Annual Register, 1917-18, p. 103

of good fellowship among all the students of the University. The Union elects annually a Student Council, which takes charge of certain student activities. The Woman's League was organized to further the spirit of unity among the women of the University and to be a medium for the maintenance of high social standards. The League manages a loan fund, supports a room in the Burnham hospital and provides the magazines for the Woman's Building.

The Students' Hospital Association is a voluntary mutual benefit organization whose purpose is to provide hospital care for its members in the event of illness. Other organizations are the Lincoln League, Ivrim, The Komenian Society, Motorcycle Club, Sewanee Circle, Scribbler's Club, Rifle Club, Country Life Club, and Intercollegiate Prohibition Association.

In addition to the organizations already mentioned there exist also the four class organizations, each of which has its officers and its committees to take charge of the various functions given by the class in the course of the year.

STUDENT ACTIVITIES

A large number of meetings, entertainments and contests occur in the course of each year as a natural result of the existence of the various student organizations. Some of these are of so general interest as to become at the time of their occurrence the focus of attention of the entire student body.

HOME-COMING

The annual fall Home-Coming was established in 1910. The idea met with great favor from the first both with alumni and with the students. The number and variety of events occurring during the two days of Home-Coming may be seen from the program of 1916, which was as follows:

ALUMNI HOME-COMING, 1916

Friday Afternoon and Evening, November 17

1:30 Parade of the Senior Hobo Band to Illinois Field.

2:30 Class Championship Football Game, Illinois Field.

- 7:00 Band Concert and Mass Meeting, Auditorium. Old "I" men to occupy seats on the platform at the mass meeting.
- 8:15 Alumni Smoker. Showing of University film "Pro Patria," Gymnasium Annex.
- 8:15 Mask and Bauble Play, "A Pair of Sixes," Illinois Theater.
- 8:45 All-Illinois Dance, given by Illinois Union, College Hall.

Saturday Morning, November 18

- 8:30 Kite-flying Contest on Military Field, south of Armory.
- 9:30 Relay Race, teams representing various student organizations, Illinois Field.
- 10:00 Cross-Country Race, beginning and ending on Illinois Field.

Saturday Afternoon and Evening

- 2:00 Football, Illinois vs. Chicago, Illinois Field.
- 4:30 Alumni Round-up in Gymnasium Annex.
- 4:30 Woman's League Tea, Woman's Building.
- 8:15 Mask and Bauble Play, "A Pair of Sixes," Illinois Theater.
- 8:15 All Illinois Dance, given by the Illinois Union, Gymnasium Annex.

Sunday Afternoon, November 19

- 4:00 Organ Recital, Auditorium. Program by Director Erb of the School of Music.

INTERSCHOLASTIC

In 1893 the high schools of the state were invited to send representatives to compete in a track and field meet. This was the beginning of the Interscholastic Meet, one of the most important of the year's series of sports. Other events have been added to the original contest until the festivities now continue for a part of three days. A representative program, that of 1916, was as follows:

INTERSCHOLASTIC PROGRAM, 1916

Thursday, May 11

- 5:30 P.M. May Day Festival, Illinois Field.
8:00 P.M. Girls' Stunt Show, Auditorium.

Friday, May 12

- 9:00 A.M. Interscholastic Golf Preliminaries.
9:30 A.M. Interscholastic Tennis Preliminaries.
1:30 P.M. Baseball, Chicago vs. Illinois.
3:30 P.M. Track Meet, Chicago vs. Illinois.
3:30 P.M. Preliminary Track Events, Class B.
4:30 P.M. Finals, Inter-fraternity Relay.
5:00 P.M. Illinois Union Open House; inspection tour thru campus and buildings.
6:45 P.M. Concert, University Military Band, South Campus.
7:30 P.M. Interscholastic Oratorical Contest, Auditorium.
8:30 P.M. Concert, University Glee Club, Illinois Theater.

Saturday, May 13

- 9:00 A.M. Interscholastic Track and Field Meet, Illinois Field.
9:00 A.M. Interscholastic Golf Finals.
9:00 A.M. Interscholastic Tennis Finals.
1:30 P.M. Parade of University Brigade, Military Field.
3:00 P.M. Baseball, Indiana vs. Illinois.
5:30 P.M. Presentation of Medals to Visiting Athletes, Tribe of Illini, Gymnasium Annex.
7:00 P.M. Interscholastic Circus, Illinois Field.
9:00 P.M. Cadet Hop, Gymnasium Annex.

On each of the three days there were held also an Exhibit of Student Work of the Department of Art and Design, in University Hall, and a Public School Art Exhibit, in the University Chapel, from 8:00 A.M. to 6:00 P.M.

In 1916 about 675 athletes competed in the Interscholastic meet, representing 98 high schools and academies. To make competition on a fair basis possible, high schools are placed in Class A or Class B according as their enrolment exceeds or does not exceed 400 students. A third class, C, is made up of

academies in Illinois, and of high schools and academies from outside the state. The contests of the three classes are held separately.

ORATORY AND DEBATE

As in the majority of our educational institutions, forensic activities have never been given the full support of the student body at Illinois. Within the past five years, however, the increasing success of Illinois orators and debaters has created a much more general interest in the various public speaking contests in which students of the University have participated.

Illinois has been a member of the Northern Oratorical League since 1909, in which it is associated with Michigan, Wisconsin, Iowa, Minnesota, Northwestern and Oberlin. The University participates regularly also in the Annual Peace Oratorical Contest of the State of Illinois, the winner of which competes in an interstate contest with the representatives of the states of Michigan, Wisconsin, Ohio and Indiana. Illinois won first place in the Northern Oratorical League in 1914, and second in 1915. The Illinois representative ranked first in 1916 in the State peace contest, and won second place in the Interstate.

Illinois is associated with two groups of state universities in debate. The Mid-West Debating League is composed of Michigan, Wisconsin and Illinois, while Iowa, Minnesota and Illinois constitute the I. M. I. Debating League. The contests conducted by the former organization are held in the spring of each year, the others occurring in December.

For the last sixteen years as a whole, Illinois has been rather more successful in oratory than in debate.

Illinois won second place in the Interstate Oratorical Contest in 1905 and 1907, her competitors being Michigan, Wisconsin, Indiana, Iowa, Minnesota, Knox and Chicago. She won first place in the First State Equal Suffrage contest in 1908. She won third place in the Northern Oratorical League in 1911 and 1917; second place in 1910, 1915, 1916, and 1918; and first place in 1914. In the Annual State Peace Contest, Illinois won second place in 1914 and 1917, and first place in 1915 and 1916.

Illinois' best years in debate during the sixteen-year period were in 1904-05, when she won both debates of the year, defeating Indiana and Missouri; 1909-10, when Iowa, Ohio and Indiana were each defeated, Wisconsin alone registering a victory over Illinois; in 1916-17, when Illinois debaters by defeating the representatives of Iowa, Minnesota and Wisconsin won the championship of the I. M. I. League and tied for the championship of the Mid-West League; and in 1917-18, when they won for the first time the championship of both Leagues in the same year. On the other hand, Illinois lost all of her four debates in 1912-13, and three out of four in 1906-7, 1910-11 and 1914-15. In each of six years, Illinois won half of her debates. The last two years of the fourteen have each shown a gain, 3 debates having been won in 1916-17, and all four in 1917-18, as against a single victory in 1914-15.

The Electrical Engineers' Show was first held in 1907, and has since become an annual event. The purpose of the Show is to exhibit the work of the students in the course of electrical engineering. It serves also to acquaint the general student body and the public at large with the latest developments in electrical engineering science. A high degree of ingenuity is displayed by the students participating, who begin their preparations several months in advance. The Show usually lasts three days.

PUBLICATIONS

Another form of student activity, entirely voluntary, but of great importance in its contribution to the intellectual efficiency of those engaged in it, is the preparation and publication of various papers, magazines and books dealing with university events or with matters related more or less closely to certain fields of study.

The Daily Illini was established in 1871 as a monthly, then called the Student. It became the Illini in 1873. Its frequency of publication increased until in 1902 it was established as a daily with six issues a week. The editor, business manager and bookkeeper of the Illini are now chosen by the Illini Board of Trustees, composed of three members of the faculty appointed by the Council of Administration, and four students elected

by the student body. The other members of the editorial and business staff are appointed by the editor and the business manager with the approval of the Illini Board of Trustees.³

The Illio is a year book published near the close of each year by the junior class. The Illinois Magazine is a monthly literary journal which appeared first in 1902. It has been published with occasional interruptions, since that time. The Siren, a humorous magazine, appeared monthly from 1911 to 1917. The Illinois Agriculturist is published monthly by the Agricultural Club. It is devoted to the various agricultural interests and regularly contains a number of articles of importance to present and prospective farmers. The Technograph is a technical journal published quarterly by a board chosen from the various student societies of the college of engineering. The Illinois Chemist is a quarterly journal published by the Department of Chemistry in the interests of its faculty, alumni and students.

³Facts for Freshmen, 1914 ed., p. 61



CHAPTER VIII

CAMPUS PLANS

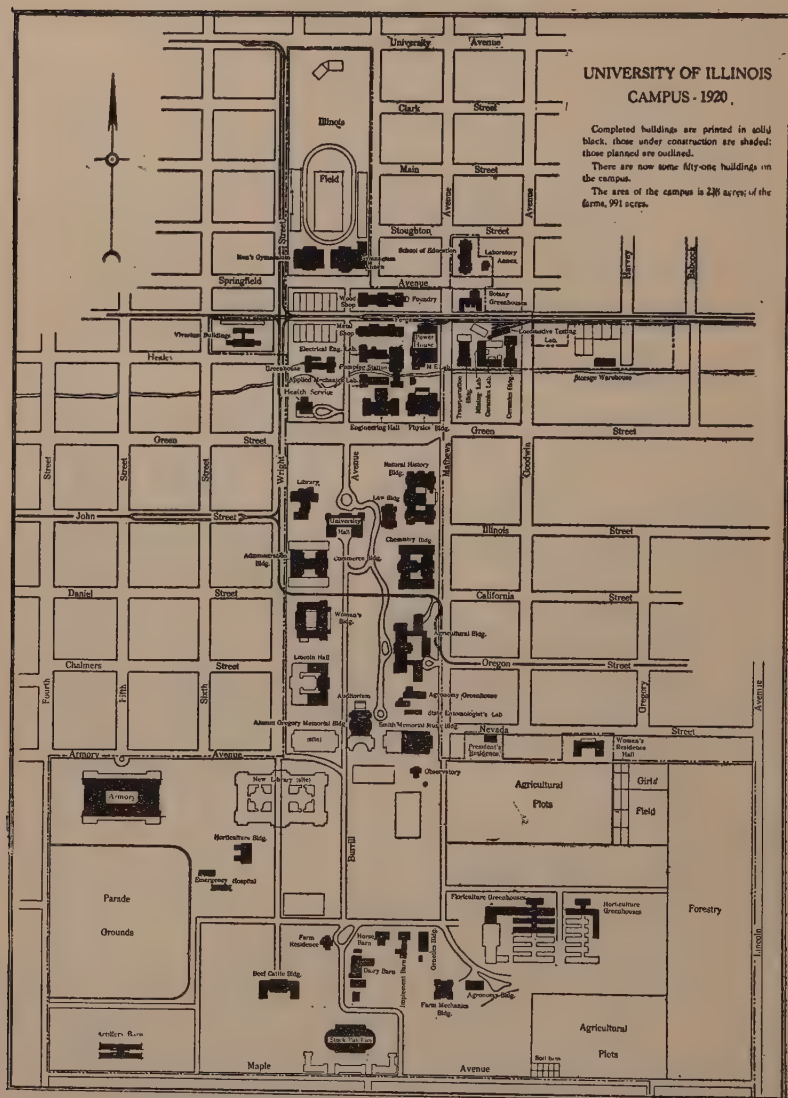
Very few universities are so fortunate as to begin their work upon a campus the details of which have been scientifically worked out in advance. In the case of a majority, the choice of a site is largely determined by chance, and the subsequent growth is in the direction of least resistance. Every university, however, which has attained to a considerable size comes sooner or later to recognize the desirability of adopting and following a definite plan for its future expansion. In any such plan due regard must be had to considerations of necessity, convenience and beauty.

As has already been indicated in an earlier chapter, the site of the University of Illinois was the gift of the people of Champaign County. From seven to ten acres constituted at first what might properly be called the campus, the remainder of the land being used for several years as a part of the University farm. One building had already been erected.

It is encouraging to note that one of the first matters given attention by the original Board of Trustees was the enlargement of the campus by purchase of adjacent land, particularly that land which lay between the two principal parts of the University's holdings.¹ The improvement of the grounds also received attention at an early date, and a plan of the campus published in the college catalog for 1871-72 (p. 16) shows a miniature forestry or arboretum occupying the tract between the street railway and Green Street. A few years later Burrill Avenue was laid out and trees were planted along it and upon a large part of the whole campus.

It is certain that in the early years of the University's history it was generally expected that buildings other than those connected with the operation of the University farm would be erected only on the extreme northern part of the grounds. The selection of a site for University Hall in 1871 was the occasion

¹Cf. *supra*, Chapter II, p. 43.



THE CAMPUS, 1920

of a vigorous discussion by the Board of Trustees. Five of the nineteen members present voted to erect the building upon the grounds north of Springfield Avenue.² However, it was decided that "the new University building shall be built on the crest of the ridge on which the gardener's house now stands, being that part of the University lands lying immediately south of Green Streets."³

The fact that this building was erected facing the north and midway between the east and west lines of the campus as it existed at that time, indicates that even the most farsighted of those in authority did not anticipate a further growth toward the south. All the buildings erected during the succeeding thirty years, except two, were placed north of the east and west axis of University Hall. So far as a plan was followed in the location of these buildings, there was a general grouping by departments, and the buildings were made to face three principal streets—Springfield Avenue, Burrill Avenue, and Green Street. The Armory and the Gymnasium were placed on Springfield Avenue near the athletic field and the parade grounds; the engineering buildings in close succession along Burrill Avenue, with Engineering Hall fronting on Green Street, the Natural History and Chemistry buildings and the Library facing Green Street from the south and the President's house from the north. The Observatory was placed far to the south that it might be well removed from the other buildings, and the Agricultural building was placed south of the general group in order that it might be accessible both from the farm and from the buildings housing related departments of study. A similar consideration determined the location of the Chemistry laboratory in 1902 between the Natural History Hall, University Hall and the Agricultural building. The Woman's building was placed to the south to insure a certain degree of privacy to the building and to the young women's athletic field adjacent.

When the erection of an auditorium was under consideration in 1905, it became evident that this structure must be lo-

²Rept., Univ. of Ill., 1870-71, pp. 112-3

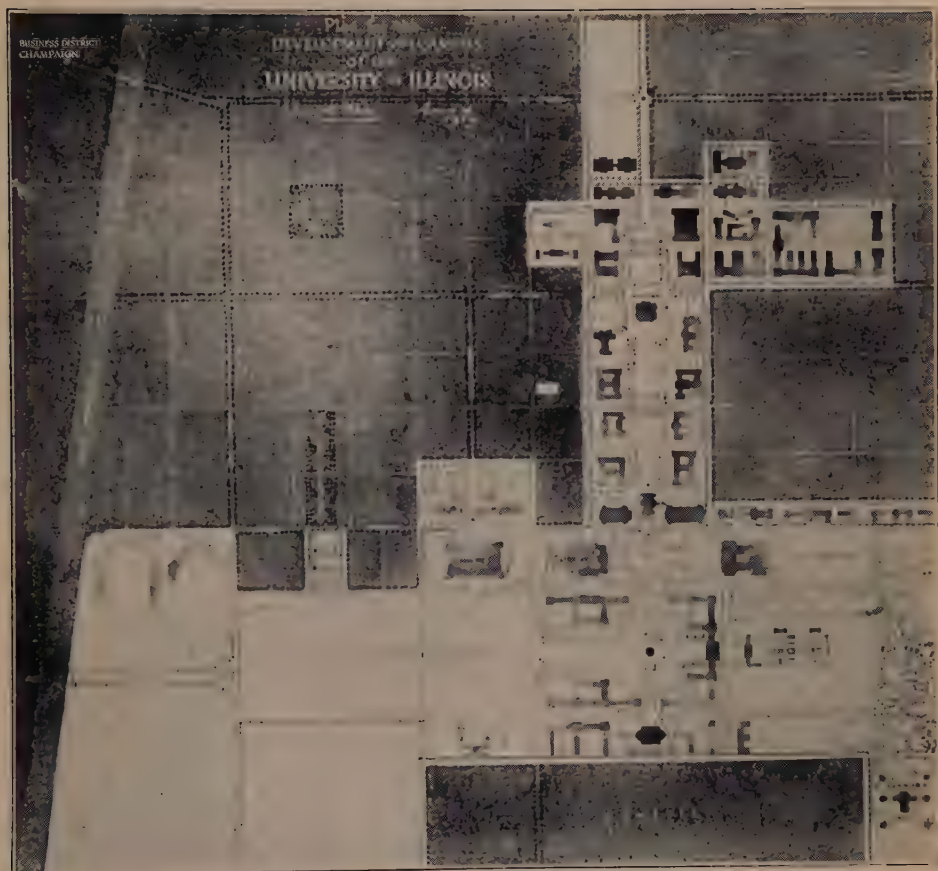
³Ibid

cated with reference to the future growth of the University, in order that it might be readily accessible from all parts of the campus. It became necessary, therefore, to fix with some degree of definiteness upon a campus plan which should provide adequately for future enlargement.

The result of much study and several conferences by Messrs. C. H. Blackall, Olmsted Brothers, and J. M. White, and later Mr. Burnham and Mr. Zimmerman, the state architect, was a decision to place the Auditorium on a north and south axis midway between Wright Street and Mathews Avenue.

This plan assumes that the future growth of the University will be chiefly toward the south of University Hall. So far as buildings have been erected or planned within the past eleven years, with the exception of the Education building, the Vivarium and those of the engineering group, this assumption has been maintained. The Commerce building, Lincoln Hall, the new Armory, the Stock Pavilion, the Administration building, the new Library, the Smith Memorial Music Hall, the Gregory Art Hall, the Women's Residence Hall, have been or will be built south of the old University building. There is seen in the location of the buildings at present under consideration the beginnings of an entirely new extension of the campus. The accompanying cut will make clear the plan which, though not formally adopted, is being quite closely followed at the present time.

It will be seen that the new Armory is southwest of the Auditorium on the axis of Fifth Street, Champaign. Similarly, the new Library is to be erected east of the Armory on its east and west axis and on the axis of Wright Street. Directly south of the Auditorium will be a group of buildings for the College of Agriculture. To the west of the Stock Pavilion is a series of buildings to be occupied by the same college. The present Agricultural Hall will be reconstructed, and the two buildings which will result will be used by the College of Liberal Arts and Sciences. West of the Agricultural group and south of the Armory extends the new parade ground, already in use, and still farther to the west along the Illinois Central tracks will be the golf links and the new Illinois Field.



A PLAN FOR CAMPUS DEVELOPMENT

The cut shows also a new building between the present Library and Natural History Hall, closing the rectangle which the Auditorium bounds on the south. University Hall and the Law building are represented as having been removed; Burrill Avenue is extended in a direct line nearly to the Stock Judging Pavilion; and a new avenue extends nearly parallel to it, verging toward the west as it goes south from Green Street at the same rate at which Burrill avenue inclines toward the east.

In this plan there are assigned for the Engineering buildings, in addition to the block now fully occupied, the block west of Burrill Avenue and north of Green Street and nearly two blocks east of Mathews avenue. North of Springfield Avenue and east of Mathews Avenue is the building of the School of Education. Directly south of the latter is the Botanical laboratory.

The plan represents also a series of women's residence halls south of Nevada Street and extending from Mathews Avenue to Lincoln Avenue. One such hall is now completed, but it is questionable whether this whole area will be thus occupied.

An interesting feature of the plan at present followed at the University of Illinois is the extent to which a combination is brought about between the system of continuous buildings with courtyards and the open order system. Of the former system Olmsted Brothers, Landscape Architects, say:⁴

"Undoubtedly the most convenient, the most economical and the most architecturally impressive plan for grouping the university working buildings would be that of continuous buildings in the border of each block of land with a court or courts in the middle forming a hollow square."

The recommendation of Olmsted Brothers was, however, in the case of the University of Illinois, for the open order system, with room for trees between the buildings. The latter plan was that which had been followed during the early years of the University, but within the past ten years it has been modified by the acceptance of the principle that there must be "a general appearance of harmony among the various buildings, in architectural style, in kind and color of exterior materials,

⁴Special report to the University of Illinois, 1907, pp. 17-18

in floor levels, cornice lines, pitch of roofs, alignment of corridors, symmetry and coincidence of axis lines, orientation and grades.''⁵ But the University has gone even a step farther, and while not constructing a series of buildings continuously about a court it has so planned the construction of each of the more important of the recent buildings as to provide for either one or two interior courts, the whole building when completed having thus somewhat the same appearance as would have resulted if a series of smaller buildings had been erected on the four borders of the same block.

It will be noticed that at present, as in the past, buildings are being grouped according to departments. Much greater regard is now had, however, for the matter of convenience in the location of buildings of general use, and an attempt is being made to foresee in so far as possible the future needs of the University, and to place each new building in that location where it will meet not only the immediate requirements, but those of the future as well.

In 1919, the Board of Trustees voted to employ as consulting architects the firm of Holabird and Roche, of Chicago, and in 1920 the Board appointed a Commission consisting of the following persons: Mrs. Margaret D. Blake, Chairman, Mrs. Mary E. Busey, Mr. William L. Abbott, Dean C. R. Richards, and Director George A. Huff. The purpose of this commission is to consider with the Consulting Architects and the Supervising Architect the development of the Campus Plan.

How far those now in authority will be successful in this endeavor only time will show. But it is significant that the problem is receiving serious study; and while it is probable that it will become evident in the course of time that errors have been committed, the likelihood of serious mistakes has been greatly decreased.

⁵Special report to the University of Illinois, 1907, p. 20

CHAPTER IX

THE COLLEGES AND SCHOOLS

The various independent colleges and schools which together constitute the University of Illinois have almost without exception exhibited a noteworthy development during the sixteen years from 1904 to 1920. The growth of these has been presented in detached form in the preceding chapters. In the present chapter there have been assembled certain of the facts already given, and some of the outstanding features of the development of the individual colleges and schools are emphasized.

1. THE GRADUATE SCHOOL

Until 1907 the Graduate School, which had been formally organized in 1892, was maintained out of general University funds. The appropriation of \$50,000 a year by the Legislature in 1907 for the support of graduate work was followed by the organization of an Executive Faculty of the Graduate School, and the adoption of more comprehensive plans for the work. It has been the endeavor of the Executive Faculty "to bring the Graduate School to the point where it shall offer instruction and equipment equal to that of any graduate school in the country."¹

The Graduate School in 1919-20 offered more than six hundred courses, graduate work being made available in practically every department of the University.

Sixteen years ago much less financial encouragement was given to prospective graduate students by the University of Illinois than at the present time. In 1903-04 eight fellowships were offered in the Graduate School, each with a stipend of \$300 per annum. In the year 1919-20, \$25,000 was appropriated for graduate fellowships with a stipend varying from \$300 to \$500 a year and for graduate scholarships of the value of \$250 each. For that year 25 scholars and 25 fellows were appointed. In addition to these, 7 persons were able to spend one-half of

¹From the bulletin, "Why go to a Graduate School," Univ. of Ill., pp. 13-15

their time upon graduate work for a degree while holding research fellowships of the value of \$500 each in the Engineering Experiment Station.

There has also been offered annually since 1911 the Francis J. Plym Fellowship in Architecture with a stipend of \$1,000. The holder of this fellowship is thus enabled to spend a year abroad in the advanced study of architecture. In 1916-17 a Celtic Fellowship of \$1,000 was established by the Irish Fellowship Club of Chicago.

The total number of students enrolled in the Graduate School in 1903-04 was 118. The number had increased to 380 in 1919-20, excluding the summer session—a gain of 262, or nearly 220 per cent. If the summer session enrolment be taken into account also, the gross total for 1919-20 was 550; and the net total, excluding persons who returned for the winter session, 466—a gain of 348 or over 294 per cent for the sixteen years.

In 1919-20 there were published under the auspices of the Graduate School the *Journal of English and Germanic Philology*, and three series of *University Studies*: Social Science Series, Language and Literature Series and Biological Monographs. The Illinois Historical Survey, an organization having for its purpose the prosecution of systematic studies in the history of Illinois, was established as a department of the Graduate School in 1910.

The Graduate School of the University of Illinois was given formal recognition in 1908 by the admission of the University to the Association of American Universities, the chief requirement for membership in which is "the existence of a strong graduate department."²

2. THE COLLEGE OF LIBERAL ARTS AND SCIENCES³

This college was formed in 1913 by the union of the College of Literature and Arts and the College of Science. Each of the

²Report of Ninth Annual Conference, 1908, pp. 74-5

³A considerable part of the data contained in this statement was furnished by Prof. E. B. Greene, Dean of the College of Literature and Arts from 1906 to 1913; by Prof. E. J. Townsend, Dean of the College of Science from 1905 to 1913; and by Dean K. C. Babcock of the College of Liberal Arts and Sciences.

constituent colleges had shown a marked advance during the years from 1904 to 1913, and this advance has continued without interruption since their amalgamation.

In 1903-04 the faculty of the College of Literature and Arts numbered 38 persons; that of the College of Science, 35, a total of 73. In 1919-20 the number had risen to 324, a gain of over 343 per cent. The advance in the standards of scholarship has been even more important. In 1904 a large part of the instruction was in the hands of men who had themselves received no considerable amount of university training beyond that indicated by the possession of the bachelor's, or at best, the master's degree. For several years it has been the policy of this College to make the possession of the doctor's degree a prerequisite—except in rare cases—to promotion to the rank of instructor or above. This degree is not insisted upon as a mere fetish, but as a concrete evidence of intellectual ability, of capacity for sustained endeavor, and of general interest in the promotion of advanced scholarship.

From 1903-04 to 1913 the enrolment of the College of Literature and Arts increased from 483 to 926; of the College of Science, from 130 to 448. The total for the combined college in 1919-20 was 2,547. In connection with this substantial evidence of growth there should be taken into account also the distinct advance in scholarship standards. The group of students who divided their time between the college and the academy has been eliminated, and a conservative policy has been pursued with reference to the admission of special students.

The growth of the University Library from 66,239 volumes in 1904 to about 428,000 in 1920, has meant much to all departments of the University, but has been of special significance to the literary and scientific departments. The actual utilization of these resources has been greatly facilitated by the establishment of the seminar rooms in Lincoln Hall and of the various other departmental libraries.

The organization, likewise, of the Museum of Classical Art and Archaeology, the Museum of European Culture and the Oriental Museum involved an important addition not only to the material available for use in formal instruction, but to the

factors which promote general culture in college life. The appointment of a full-time Curator of the Museum of Natural History is significant of further growth in service.

Important progress was made during the years from 1904 to 1920 in the construction of buildings for this division of the University. The erection of Lincoln Hall, the Vivarium, the Botany Greenhouse and the additions to the Natural History Building and the Chemistry Laboratory, served to relieve conditions which were fast becoming insanitary through overcrowding, and gave opportunity both for the expansion of the literary departments and for the more complete utilization of the scientific laboratories and equipment.

The conduct of the Journal of English and Germanic Philology; the editing of the Yearbook of the German American Historical Society of Illinois, the Illinois Historical Collections, the Mississippi Valley Historical Review and the Journal of the American Chemical Society; assistance rendered the State Tax Commission, the State Efficiency Commission and other state bodies, are some of the many activities outside the regular field of University work which have been carried on by members of this college during a part of the last sixteen years in the interest of productive scholarship or of expert service to the State.

FROM 1913 TO 1920 ⁴

As previously mentioned the College of Liberal Arts and Sciences was created by the union of the College of Literature and Arts and the College of Science. The union became effective on the first of July, 1913 and the new College therefore completed the first five years of its existence with the end of the last fiscal year. The requirements for admission and for a degree in the two colleges differed considerably and the reorganization of curriculum and procedure has been a slow and sometimes difficult process, but at the end of seven years, the complete unification of the College has been accomplished.

The new curriculum for the A. B. degree was worked out by the faculty of the College and finally approved by the Board

⁴A special statement by Dean K. C. Babcock

of Trustees in June, 1914. It is based upon the principle of minimum requirements in six groups of subjects and a larger requirement in one major subject, buttressed with a group of allied minor subjects. The principle of election is also observed in provisions by which students may have free election of about forty out of one hundred thirty hours, in subjects taken in departments of this College, or in a limited number of subjects in departments in other colleges of the University.

Considerable expansion has been made in the plan of combined courses in Liberal Arts and Sciences on the one hand, and Law, Medicine and Dentistry on the other. By this, it is now possible for a student to get an A.B. degree upon the completion of three years' work in Liberal Arts and one year's work in Law, Medicine, or Dentistry, either in the University of Illinois or in another approved institution.

By a process of division, the College of Commerce and Business Administration was created out of the College of Liberal Arts and Sciences, effective September first, 1915 and the work in ceramics and ceramic engineering was transferred to the College of Engineering. As a consequence of this division, the registration of the College of Liberal Arts and Sciences fell from 1,858 for 1914-15 to 1,552 in 1915-16, and rose to 1,784 for 1916-17 and to 2,547 in 1919-20.

The College of Liberal Arts and Sciences continues to be the great service college for the other colleges of the University, and departmental unity has been maintained with a remarkable consistency. All the instructional work in English, mathematics, chemistry, zoology and botany required by the curriculums in agriculture and in engineering is given by these departments in the College of Liberal Arts and Sciences.

The service feature of the College is illustrated also by its complete co-operation with the Graduate School. With minor exceptions, all salaries of persons giving instruction or conducting research in the Graduate School in departments represented in this College, outside of stipends for graduate students, are paid out of the budget of the College, and allowance of time for research and productive scholarship is made in arranging the schedule of work for promising men on the faculty. In a few

cases, a professor is relieved of undergraduate teaching for a semester, in order to devote his time to investigation and writing. In others, the burden of teaching is materially reduced for a period agreed upon with the Graduate School. The number of research assistants has been increased in order to facilitate the investigations of men of distinction and promise. Such assistants have been provided upon a more or less permanent basis in the departments of Botany, Chemistry, the Classics, Mathematics and Zoology. This does not take into account the work of the Illinois Historical Survey, which is closely allied with the Department of History.

Notable changes have occurred in several departments. A new professor and head of the department has been appointed in Botany, in Geology and in Romance Languages. The resignation of the chairman of the Department of English was followed by the promotion of another professor to the chairmanship and the addition of a new full professor. An increased registration in the University led to large increases in the staff of the departments of English, Chemistry, Romance Languages and History. In the College, a net total of twenty additional men of professorial rank, exclusive of added members of middle or lower ranks, marks the period of seven years.

For seven years, the College has carried a system of special advisers for freshmen and sophomores, in order to give students coming for the first time to the University a helpful relation with mature and sympathetic members of the faculty, over and above the necessary official relationship with administrative and instructional officers, and supplementary to the offices of the Dean of Men and the Dean of Women. By assigning to a single teacher small groups of students, usually not exceeding twelve, and by selecting these students with reference to their personal qualities as developed by correspondence with previous high school teachers and instructors, the service rendered has proved distinctly helpful and has been greatly appreciated. The co-operation of the high school principals and teachers has been generous and cordial. For the first three years, each adviser was paid a small sum to cover incidental expenses of this service.

3. THE COLLEGE OF ENGINEERING, AND THE ENGINEERING EXPERIMENT STATION⁵

In the development of the University of Illinois, the College of Engineering was early recognized as one of the strong technical colleges of the country, and by the year 1904 its standing may be said to have been assured. During the past sixteen years there has been very significant progress made in the College of Engineering not only in the character of work done, in point of student attendance and in size of faculty, but more particularly through its contributions to engineering science.

GENERAL COURSES

In 1904-05 the College of Engineering was composed of the following departments: Architecture, Civil Engineering, Electrical Engineering, Mechanical Engineering, Municipal and Sanitary Engineering and Physics.

Four year courses leading to the degree of Bachelor of Science were offered in Architecture, Architectural Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Railway Mechanical Engineering and Municipal and Sanitary Engineering.

The importance of transportation problems led to the establishment of a separate Department of Railway Engineering and the School of Railway Engineering and Administration on January 30, 1906. Prior to this time the course in Railway Mechanical Engineering was given by the Department of Mechanical Engineering. The activities of the School of Railway Engineering and Administration included a series of courses in Railway Engineering administered by the College of Engineering, and courses in Railway Traffic, Railway Accounting and Railway Administration administered by the College of Commerce and Business Administration. Also it offered courses in Railway Civil Engineering, Railway Electrical Engineering, Railway Mechanical Engineering, Railway Traffic and Accounting and Railway Transportation. "In 1917 the activities of this

⁵Synopsis of a special report by C. R. Richards, Dean of the College and Director of the Station

school were suspended because the leading members of its faculty were called away for war service.”⁶

The Department of Mining Engineering was established on June 8, 1909, by an act of the Legislature in response to a demand for instruction in this subject on the part of the mining interests of the state. Prior to the organization of this Department a limited amount of instruction in mining engineering had been given. The Department has shown much progress in the various lines of work under its direction.

During the period under consideration, two departments of engineering, namely, Chemical Engineering and Ceramic Engineering, were established in the College of Science, and a quasi-engineering department known as the Department of Farm Mechanics was established in the College of Agriculture. The Department of Ceramic Engineering was transferred to the College of Engineering in 1915.

SPECIAL ACTIVITIES ADMINISTERED BY THE COLLEGE OF ENGINEERING

During recent years the College of Engineering has administered certain special or extra activities of importance to the State. As a result of the Cherry Mine disaster, there was established at a special session of the Legislature during the winter of 1910 a Mine Rescue Service in Illinois under the control of the Mine Rescue Commission, consisting of two mine operators, two miners, one mine inspector, one representative of the United States Bureau of Mines and one representative of the Mining Engineering Department of the University of Illinois. The University may justly claim much of the credit for the establishment of this service, as it was the direct outgrowth of the pioneer work of the Urbana Rescue Station.

On July 1, 1911, an appropriation of \$10,000.00 for two years, made by the Legislature for co-operative investigations in mining, became available. Under the arrangements entered into, the United States Bureau of Mines, the State Geological Survey and the Department of Mining Engineering of the University have co-operated in the investigation of mining condi-

⁶Univ. of Ill., Annual Register, 1917-18, p. 50

tions in Illinois. Much work of importance to the mine operators and miners of the State has been accomplished under this co-operative scheme. The University has continued to maintain this co-operative work under the new arrangement of financial administration.

In 1913 the Legislature appropriated the sum of \$30,000.00 for two years to establish and maintain Miners' and Mechanics' Institutes which were placed under the direction of the Department of Mining Engineering. The purpose of the Miners' and Mechanics' Institutes was somewhat similar to that of the Farmers' Institutes, but their specific purpose was to assist men who are preparing themselves to pass the tests required by the State before they can hold official positions about the mines.

A short course in Highway Engineering was given for the first time from January 19 to 31, 1914, and this has become an annual event. The course was placed under the immediate supervision of the Department of Civil Engineering. It was planned primarily to aid the newly appointed County Superintendents of Highways in preparing for their duties, and to help any other persons interested in highway construction. It is especially significant that of the 66 county superintendents of highways provided for in the 1913 law, no less than 63 appeared at the first session and remained thruout the entire course.

THE ENGINEERING EXPERIMENT STATION

The Engineering Experiment Station was established by action of the Board of Trustees on December 8, 1903, in connection with the College of Engineering. The purpose of the Station is to carry on investigations along various lines of engineering, and to make studies of problems of importance to professional engineers and to the manufacturing, mining, railway and other industrial interests of the State. The first bulletin issued by the Station bears the date of September 1, 1904. There was, however, no Station organization until Professor L. P. Breckenridge was appointed Director of the Engineering Experiment Station on June 2, 1905. During the period which has since elapsed one hundred fifteen bulletins have been pub-

lished, many of which are recognized as distinct and important contributions to the science of engineering.

Probably none of the activities of the College of Engineering is of greater importance or has received more favorable and widespread attention than the Engineering Experiment Station. It was the first Engineering Experiment Station ever established in connection with an educational institution. The work of the Station is carried on under the Director, who since 1909 has been the Dean of the College of Engineering, and an administrative staff composed of the heads of the several departments of the College. Much of the research work is conducted by investigators on full-time appointment, and by research fellows and assistants who give half-time to the investigations under way in the Station.

STUDENT ENROLMENT

As has been indicated, up to the year 1904-05 the College of Engineering had attained considerable prominence, and as a result attendance had been stimulated to a degree which made the College one of the largest in the country in point of student enrolment, a position which it has since maintained. The attendance in the College of Engineering here and in technical schools elsewhere reached a maximum in the year 1919-20, when the total enrolment of undergraduate engineering students at Illinois was 1,768. There are only two or possibly three institutions in the country which have a larger enrolment of engineering students than the University of Illinois.

FACULTY

Perhaps the most important development in the College of Engineering during the past sixteen years has been in the number of members of the regular staff of instruction. The College of Engineering was very badly undermanned sixteen years ago, as there were 20.9 students for each member of the staff of instruction at that time, while at present there are 17 students for each member of the staff.

Up to the appointment of Dr. W. F. M. Goss to the deanship of the College of Engineering in 1907, a large part of the

*Dentistry
Building*



College of Medicine



Pharmacy Building

BUILDINGS IN CHICAGO

duties of the Dean of the College were clerical, including such work as the enrolment of students, the maintenance of student records, student discipline, etc. The new Dean at once made arrangements whereby one of the Professors in the College of Engineering should give a portion of his time as Assistant Dean to this work. Unquestionably, this arrangement has been of great value in the administration of student affairs, and the Dean has thereby been enabled to give his attention to the larger problems of administration.

THE ALUMNI OF THE COLLEGE OF ENGINEERING

From the establishment of the University up to and including the class of 1904, the College of Engineering had graduated 820 persons, and up to and including the class of 1919, it has graduated 3,326 persons. It is thus evident that about 75 per cent of the graduates in engineering have completed their work during the past sixteen years. A recent investigation showed that 89.32 per cent of the alumni of the College are employed in some branch of technical work.

One of the most important facts in connection with the graduates of the College of Engineering is that slightly over 50 per cent of the total number reside in the State of Illinois. It is self-evident that these technically trained men have had a distinct influence upon the industrial development of the State.

BUILDINGS AND EQUIPMENT

Six important buildings for the use of the College of Engineering were erected during the period from 1904 to 1920; namely, the Ceramics Laboratory, costing \$130,998.79; the Locomotive Laboratory and Reservoir, \$34,270; the Mechanical Engineering Laboratory, \$85,671.90; the Mining and Ceramics Laboratory, \$25,000; the Physics Laboratory, \$220,000, and the Transportation Building, \$86,000. In spite of the expenditure of \$581,940.69 for these structures, many departments of the College are still crowded for room.

During the same period the value of engineering equipment, exclusive of furniture and fixtures, rose from \$94,391.02 to \$425,383.44, a gain of over 350 per cent.

OTHER CHANGES

During the past sixteen years there have been many changes in methods of instruction, in the administration of student affairs, in the development of scientific work and in the extension of the influence of the College through the outside activities of its professors.

Since 1909 the College of Engineering has held a convocation for its freshmen students each Wednesday morning at 10 o'clock under the immediate supervision of the Assistant Dean of the College. At these convocations, lectures are given by members of the faculty and by visiting engineers. They also afford an opportunity for the Assistant Dean to present to the freshmen such information as will be to their best interest.

During the past few years there have been several changes in the method of registering students and in the maintenance of student records. One of these involves photographing each new student and attaching the picture to the student's record card to permit of his identification.

There has been developed also a file of graduate record cards which record the impressions of the graduate's instructors regarding his general ability, appearance, etc. The graduate's photograph is pasted on the card, so that information regarding the record of graduates of the College of Engineering can be furnished with little difficulty.

One of the most significant of the recent experiments undertaken by the College of Engineering is the method of shop instruction. Up to 1912, practically all shop instruction in American colleges was by methods similar to those used in manual training. It became evident that in a technical school, shop work could hardly be justified unless it had a distinct engineering value; that is, unless it emphasized the engineering rather than the manual features of such work. Eight years ago an experiment in shop instruction was begun in the Illinois laboratories with the idea of using these laboratories to teach the engineering and economic principles of machine construction and the science of shop management rather than to attempt to give the students a smattering of manual skill. This method of instruction has proven highly successful.

4. THE COLLEGE OF AGRICULTURE AND THE AGRICULTURAL EXPERIMENT STATION

It is probable that no division of the University has exhibited a more striking growth during the last sixteen years than the College of Agriculture.

In 1903-04 the total number of students registered in this College was 308. For 1919-20, the enrolment was 1,215, a gain of 907, or 294 per cent for the sixteen years. In 1904, only 16 graduates received the degree of Bachelor of Science in Agriculture. This number grew to 235 in 1917, but dropped to 139 in 1918 and to 65 in 1919 on account of the war. In April, 1920, there were 150 members of the senior class in Agriculture in good standing. It will be noted that while the total registration in the College multiplied nearly four times during the sixteen years, the senior class was fourteen times as large in 1916, and nearly ten times as large in 1920 as in 1904, an indication that the increase in quality of the students was even more marked than in numbers. This is further evidenced by the fact that whereas in 1904 there had not been a graduate student in agriculture for ten years, during the year 1919-20 there were 56 (66)* graduate students doing work in agriculture.

Sixteen years ago there were 37 members on the agricultural faculty, including both College and Station. In 1919-20 there were 119 members on full-time and 12 more devoting one-half or a larger part of their time to the work of instruction, a total of 131. The relative growth of the various departments is indicated in the following table:

FACULTY OF COLLEGE OF AGRICULTURE AND AGRICULTURAL EXPERIMENT STATION, 1904 AND 1920

Department	1903-04	1919-20
Administration	2	2
Agromony	12	38
Animal Husbandry	5	29
Botany	3	(Discontinued)
Dairy Husbandry	6	11
Farm Organization and Management	..	4
Extension	1	5
Horticulture	5	17

*Figures in parenthesis are for the year 1916-17

Home Economics	2	24
Smith-Lever Service	..	10
Veterinary Science	1	..
Total	37	131

The number of full professors in this College increased during the period from six to thirty-one, and the number of associate professors and assistant professors from three to twenty-one.

In 1903-04 the College and Station were receiving a total of \$189,000 annually from the Federal Government and the State of Illinois. For the year 1919-20 the total sum expended by the College and Station was \$949,080.

Rapid as the increase has been in the funds available for the College and Station, the income has not kept pace with the increasing demands as indicated by the number of students, the higher grade of work called for, and by the greatly increased demand for experimental investigation. Sixteen years ago nearly all the instructional work was elementary, as demanded by the large preponderance of lower classmen. Now with 150 (235) seniors and 43 (66) graduate students, conditions have notably changed, and the call is primarily for highly differentiated instruction. The development has been no less important in regard to research. The problems calling for solution in the state are difficult ones requiring the most careful research by judicious and well-trained men. Numerous and expensive publications are necessary. The regular mailing list has reached a total of 43,000, while a supplementary list contains approximately 60,000 names. Up to the summer of 1920, 225 bulletins and 240 circulars had been issued by the Station.

The value of agricultural equipment, exclusive of furniture and fixtures, has increased from \$60,425.37 to \$291,948.69. In 1904 the College possessed only a small number of animals. The number now owned fluctuates greatly from year to year, but is approximately 1,100, consisting of about 150 dairy cattle, 500 hogs, 70 horses, 204 sheep, and 175 beef cattle. Among the animals are many specimens that would distinguish any collection. In addition there are about 2,500 chickens, turkeys and other kinds of poultry.

During this period the University purchased 570 acres of farm land in the vicinity of Urbana and Champaign, and acquired by gift or purchase 30 experiment fields located in various sections of the state, containing a total area of over 700 acres.

The indoor laboratory equipment has practically all been installed within the last sixteen years. It is entirely suitable for its purposes, so far as it is sufficient in quantity; and in respect to the work in soil fertility, soil physics, animal nutrition and plant breeding, it is unexcelled.

Nearly all the buildings at present occupied by the College of Agriculture were erected during the last sixteen years. Of 28 buildings now in use, the original cost of which was approximately \$570,000, only the main Agricultural Building and five minor structures, the total cost of which did not exceed \$200,000, were in existence in 1904. No major buildings, however, with the exception of the Stock Judging Pavilion and the Horticultural group, were erected during this period, and the College has for some time been so handicapped by the lack of sufficient room as to impair seriously its efficiency. A new agricultural plant to cost not less than \$2,000,000 was the first item of a ten-million-dollar building program proposed to the Legislature in 1917.⁷ Of the \$2,000,000 asked of the Legislature for the biennium 1917-19, it was planned to use \$500,000 for the erection of the first unit of the Agricultural plant. The restriction imposed by the Legislature in 1917 on all building activities by state institutions led to the refusal of funds for the inauguration of the projected building program. The College of Agriculture has already felt the effects of the over-crowded conditions under which its work is conducted, having found it necessary to discontinue offering many advanced courses in highly important subjects and is likely to be forced to the necessity of turning away prospective students unless adequate space is provided in the immediate future.

During the past sixteen years new lines of work have been developed in the fields of floriculture, landscape gardening, animal nutrition, plant breeding and genetics. As has already

⁷Cf. Senate Bill 366, 50th G. A.

been indicated,⁸ the College has co-operated actively since 1914 with the Federal Government in the extension work provided for by the Smith-Lever Act of that year. There has recently been established also a system of extension schools in various parts of the state. A complete system of student advisers for the upperclassmen has been established, as also a special committee to deal with the freshman class, shaping it into genuine university material. In order to assist in the social improvement of country life conditions, a community adviser has devoted his time since 1914 to the study of the problems of country life, and to the development of methods for dealing with them.

Two representatives are regularly sent to each of the hundred county institutes held annually, and technical information arising out of the investigative work carried on at the Station and College is thus brought directly to the farmers of the State. There is no doubt that the latter have within the past sixteen years developed a new attitude toward agriculture, a new knowledge of its requirements and a new consciousness of their opportunities and their responsibilities.

Of the many problems upon which untiring study has been devoted during the recent period, probably none is of greater importance to the people of Illinois than the determination of the methods by which the various soils of the state might be treated in order that they might not only produce the largest possible crops, but also maintain their fertility from year to year and even become more productive. This has involved the inauguration of a complete soil survey of the state, including the chemical analysis of all the soils. As a result of this investigation, knowledge has been acquired that will enable the farmers of Illinois to arrest the gradual decline in the fertility of the soil, which was becoming more and more evident, and to restore those elements which insure the highest productivity.

5. THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION⁹

The movement for higher commercial education in the United States began about 1899, a year after the establishment of the

⁸Cf. Chapter I

⁹Summary of a special report by N. A. Weston, Acting Dean

Commercial University (Handelshochschule) of Leipsig, Germany, which was the first institution of its kind in the world. To place the University of Illinois in line with this movement the Illinois Legislature was asked to make an appropriation in 1901. This was done, and in 1902 the Courses in Business Administration, then known as "The Courses of Training for Business," but always popularly spoken of as the "School of Commerce" were established with Professor David Kinley, at that time Dean of the College of Literature and Arts and head of the Department of Economics, as Director. The new work was included in the Department of Economics: two new professorships were created in the Department, one in commerce and the other in industry and transportation; and new courses in commercial subjects, corporation finance, insurance and transportation were added to the work already being given.

The success of the new undertaking was almost immediately assured. The new courses became popular at once and the registration rapidly increased. A noteworthy incident of the establishment of the business curriculum, aside from the large number of students electing the four-year business courses, was the increased enrolment of general Liberal Arts and Science students, as well as engineering and agricultural students, in both the theoretical and practical subjects of economic study. The early success achieved by the courses led in 1907 to an increase in the appropriation by the Legislature which made possible a considerable expansion of the work, especially in accounting, industry and railway administration, and the addition of new professorships.

The progress of the work after 1907 was more marked. The enlarged staff of instructors and the increase in number of courses and students early brought into prominence the urgent need of special accommodations and equipment for the work in commerce. The business interests of Illinois soon realized that to secure full service from the courses a special building was required. With their assistance, the Legislature was convinced of the necessity, and though the full amount requested was not granted, an appropriation of \$125,000 was made in 1911 for the erection of the Commerce Building. The

building was completed and occupied in the spring of 1913 and its anticipated advantages have been fully realized. The students in business administration have been made to feel an individuality previously unknown, the professional character of their training has become more distinct and the instructors have been brought into more intimate touch with one another and with students. With the new facilities and equipment the work in accounting, statistics, banking, railway administration, commerce and other subjects has been developed to a degree of practical efficiency unattainable in the past. It ought to be a matter of pride to the citizens of Illinois, as well as to the University administration, that, in developing its facilities to train men for useful careers in public and private business administration, the State has placed itself in the vanguard of educational progress.

The most important step taken in the development of business education at the University of Illinois was the decision to erect the courses in Business Administration into a distinct and separate College. The University Senate at its meeting in June, 1914, voted to recommend the separation of the Business Courses from the College of Liberal Arts and Sciences in which they had hitherto been virtually an autonomous administrative department. This recommendation was adopted by the Board of Trustees and a resolution passed authorizing the establishment of an independent College of Commerce and Business Administration co-ordinate with the other principal colleges of the University. The College was formally organized in 1915. This change led to important modifications in the business curriculum and allowed the introduction of a larger number of technical and semi-technical courses essential for efficient business training.

In 1903-04 the business courses were conducted under the general direction of the Department of Economics. Upon the organization of the College of Commerce and Business Administration in 1915 the work was placed under three separate departments, namely, economics, including finance and statistics; business organization and operation, including accounting and business law; and transportation.

For the year 1903-04 the enrolment in the business courses was 41. The number rose steadily from semester to semester with remarkable uniformity, until in 1919-20 a total of 1,588 students were enrolled in the new college. For the six years previous to 1919-20 the annual increase ranged from 25 to 38 per cent.

Eighteen years' experience with the courses in Commerce and Business Administration seems to warrant fully the belief that university commercial education, though regarded in many quarters a dozen or sixteen years ago as a doubtful innovation if not an educational fad, is a social and economic service of the highest importance and promise.

6. THE COLLEGE OF LAW¹⁰

In 1904-05, the College of Law had hardly more than a rudimentary law library—a few text books and copies of the reports of courts of last resort in about one-fourth of the states. The number of books was considerably below the minimum of 5,000 which is now required for membership in the Association of American Law Schools. It has today an excellent working library of over 22,000 books. It contains not only full sets of the courts of last resort of all the states of the Union, but also sets of the English, Irish and Canadian reports, and over 2,000 text-books upon almost every subject known to law.

The faculty in 1904-05 consisted of six members including the Dean. There are now seven. They are, on the average, men of much stronger native ability, better legal training and of much greater experience in teaching. Courses have been added in Bankruptcy, Conflict of Laws, Conveyancing, Future Interests in Property, Insurance, Quasi-Contracts and Public Service Companies, and additional work is given in Constitutional Law.

The requirements for admission have been raised from a certificate from an accredited high school to the completion of two years' college work. Students who enroll in the four-

¹⁰Summary of a special report by Judge O. A. Harker, Dean of the College of Law from 1903 to 1916

year law course organized in 1917 will be admitted upon the completion of 30 hours' college credit.

The standard of scholarship in the College has been distinctly raised. The students work more earnestly and graduate better equipped than formerly. The change is due in part to raising the entrance requirements, but chiefly to changes in administration and in the conduct of instruction.

The success of graduates of this College in the examinations given by the State Board of Bar Examiners for admission to the bar has been remarkable. It is probable that no law school in the country has a better record. Nor are the graduates of the College less successful in practise. Within the last sixteen years, twenty-eight have been elected to the office of State's Attorney; seven have served as Assistants to the Attorney General of the State; three have been elected to the office of circuit judge, and one to the office of Supreme Judge of the State of North Dakota, while another has been appointed Associate Justice of the Supreme Court of China.

Improvements that have been made in the Law Building include a five-story fire-proof book stack, with a capacity of 22,000 volumes; remodeling and refurnishing class rooms; adding a reading room, a law club room, and a consultation room; lockers and a coat room for students; a reading room and two new offices for the faculty; a remodeling of the basement and entrances, and new electric lighting.

RECENT DEVELOPMENTS¹¹

In 1916 Prof. H. W. Ballantine of the University of Wisconsin was appointed Dean of the College of Law of the University of Illinois. The new Dean has to his credit a long list of articles in legal periodicals, and two books, "Problems in the Law of Contracts," and a revised and modernized edition of Blackstone's Commentaries. He is recognized also as an expert in the field of Martial Law.

Perhaps the most notable recent achievement of the College of Law was the establishment in 1917 of the Illinois Law

¹¹Extracts from a special article by Prof. J. N. Pomeroy of the College of Law

Bulletin, a new publication which will appear three times a year. The primary function of the Bulletin is the discussion of Illinois law. Professor William G. Hale is the editor.

The criticism frequently made, that students in law colleges get no training in actual practise, is met at the University of Illinois by rigorous practical work in moot court. For 1916-17 this work involved not only the argument of questions of law, but the actual trial of many cases on issues of fact, and the conduct of all the steps in legal procedure. Other practical work introduced during the year 1916-17 included new courses in brief-making for first year students, and in the examination of titles and drafting of documents for third year students.

The decision of the Trustees in 1917 to remove the tuition fee previously charged students in the College of Law was a step which should prove distinctly favorable to the growth of this college.

The College of Law of the University of Illinois is subject to unusually severe competition. It is not strange therefore that under the present pre-legal requirements its numbers have shrunk below what they were when the College required for admission no more than the completion of a high school course. This shrinkage in attendance is however more than compensated for by the increased efficiency and higher quality of the work. Under competent and enthusiastic leadership and with an adequate backing, there is no reason why the official law college of the state should not come to be recognized as equal to the best law schools in the country.

7. THE LIBRARY SCHOOL 1904-20¹²

Beginning with 1911 the entrance requirements to the Library School, which had been three years of college work, were raised to four years of college work. In spite of the successive advance in the entrance requirements from two years of college work, then to three years and finally in 1911 to four years, the attendance of the School has not materially decreased, and

¹²A special report by P. L. Windsor, Director

is at the present time limited by the capacity of the School quarters to about 45 students. There is only one other Library School with entrance requirements as high as those of this school.

Besides general improvement in the instruction, due in part to greatly improved equipment and library resources, the principal changes in the curriculum have been:

1. The development of the course in Public Documents to include municipal and foreign documents as well as federal. This is now a 2-hour course extending over two semesters.

2. Since 1905 Edna Lyman Scott has come to the School each year to give instruction in the selection of books for children and in the administration of children's libraries. In the beginning her work extended over three weeks, but in recent years Mrs. Scott has given five weeks' work to both juniors and seniors in the second semester.

3. Since 1907 senior students have been required to work a month in a public or other well organized library, under usual staff conditions as far as possible. This field work has been of marked value to the students and the plan has been followed by other library schools.

4. Beginning in 1914, the faculty allowed senior library school students desiring to fit themselves for work in a special library, such as an agricultural or chemistry library, to substitute those advanced courses in other colleges or schools of the University which would more definitely contribute to their preparation.

In 1905-06 there were students registered from 6 states; in 1917-18 there were students from 16 states and 3 foreign countries. These figures are indicative of the enlarged territory from which the School now draws its registrants. During recent years between twenty and twenty-five colleges and universities, well scattered thruout the country, have been represented by their alumni who enrolled in the Library School of this institution.

Alumni and former students of the School are now employed in library work in 29 states, the District of Columbia and 2 foreign countries; 121 in university or college libraries; 93 in public libraries; 13 in large reference libraries; 34 in

normal school or high school libraries; 20 in U. S. or state libraries; 13 in business or corporation libraries, and 7 in state library commission offices.

Since 1911 the Library School has conducted each summer, courses in library methods, intended primarily for librarians and library assistants in Illinois libraries, who are not prepared or cannot afford to spend a year in a regular library school. The great majority of students attending these courses are from Illinois libraries, and the help thus given by the University has been more and more appreciated by librarians and library trustees of the state. A total of 229 students, 165 from Illinois libraries, have been enrolled since 1911.

8. THE SCHOOL OF MUSIC

Instruction in music was provided almost from the time the University was established.¹³ For many years, however, the instructors received no salary from the University, their only compensation being the fees collected from their pupils.¹⁴

A suggestion made to the Board of Trustees by Prof. T. J. Burrill in 1892, while Acting Regent of the University, that music be included in the regular system of instruction,¹⁵ resulted in an appropriation of \$300 by the Board for the formal establishment of such a department. The suggestion was however repeated by President Draper in his first annual report in 1895, and upon being invited by the Trustees to prepare plans for the inauguration of a department of music, he reported that the department could be established on a very satisfactory basis at an expense that would not exceed \$1,600 per annum.¹⁶ The department was accordingly established.

In 1897, Captain Thomas J. Smith of Champaign, then a member of the Board of Trustees, began to urge upon his colleagues the desirability of reorganizing the Department of Music; of putting it upon the basis of a distinct college of the University; of employing a dean with sufficient assistants;

¹³Cf. Catalogs, 1873, p. 48; 1876, p. 59; 1877, p. 64; etc.

¹⁴Rept., Univ. of Ill., 1878, p. 10; *ibid*, 1880, p. 252

¹⁵*Ibid*, 1892, p. 205

¹⁶*Ibid*, p. 96

of charging no greater tuition to students in music than in other departments of the University; and of granting degrees to graduates of that college.¹⁷ His efforts bore fruit in 1897 when it was voted by the Board that the department of music should be made the School of Music, to be conducted on the same basis as the Schools of Law, Medicine, etc.; and in 1900 when it was voted that after September 1st of that year all matriculated students who were residents of Illinois should be entitled to instruction in all departments of the School of Music at no higher rates than the students in other divisions of the University were charged.¹⁸

The enrolment in the School of Music was 101 in 1903-04, but this number fell to 80 in 1904-05, and did not again exceed 100 until 1916-17 when 108 students were enrolled. The minimum reached during the sixteen years was 61 in 1909-10, at which time more rigid requirements were adopted, resulting in the elimination of certain classes of students.

FROM 1904 TO 1920

Up to the year 1905 only one student had graduated from the School of Music. There was one graduate in that year, and this number was not exceeded in any year until 1910, when four persons received the degree of Bachelor of Music. The maximum was reached in 1915 with 10 graduates. In 1919 there were 7.

Fifty-one courses in music were offered in 1903-04. Of these a large number were elementary. By 1919-20 the number had increased to 160 and three years of preparatory study in Piano, Voice or Violin were required for admission to the School.

During this period there were various changes in the administration of the school which resulted in the establishment of a strengthened curriculum, in better methods for conducting the work and in better relations with the student body. Entrance and semester examinations are now carried on more strictly, and a higher quality of work is becoming evident as a consequence.

¹⁷Rept., Univ. of Ill., 1898, p. 107, 113; 1900, p. 212

¹⁸Rept., Univ. of Ill., 1898, pp. 124-5; *ibid*, 1900, p. 255

An action resulting in especial benefit to the School of Music was taken in 1913 by the Board of Trustees, when provision was made for a series of eight orchestral concerts to be given at the University annually by four of the leading orchestras of the country.¹⁹

In 1913 also, an appropriation was made by the Trustees for the purchase and installation of an organ in the Auditorium. The organ was formally dedicated on December 3, 1914, with a concert by Professor Charles Heinroth of the Carnegie Institute of Pittsburg.²⁰

The event of greatest significance to the School of Music during this period was the gift of approximately 768 acres of valuable farm land, in 1914, by Captain Thos. J. Smith of Champaign—whose interest in the School of Music as a Trustee has already been indicated—to provide funds for the erection of a Music Hall as a memorial to his wife, Tina Weedon Smith. The gift was formally accepted by the Trustees, and the building, the cost of which is estimated at \$450,000, was completed in 1920.²¹

THE SCHOOL OF MUSIC IN 1920²²

The position of the School of Music in the University of Illinois is probably unique among similar institutions in this country. Its organization along strictly academic lines, as a part of the University, and without any outside relationships whatsoever, is different from that of any other of the schools which offer courses in practical music.

The greatest accomplishment of the School of Music within the past five years has been in perfecting the organization, standardizing the work and, incidentally, raising standards so far as possible. In other words, the development has been intensive rather than extensive—the limitations of quarters and equipment making it impossible to increase the enrolment to any extent. Existing organizations have been built up and

¹⁹Rept., Univ. of Ill., 1914, pp. 264, 591

²⁰Rept., Univ. of Ill., 1914, p. 655; *ibid.*, 1916, p. 166

²¹See also Chapter II and III

²²A special statement by J. Lawrence Erb, Director of the School of Music since 1914

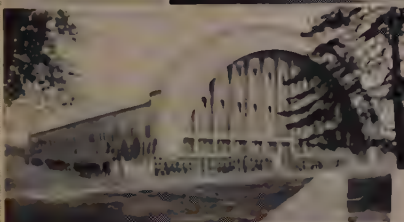
their activities increased. Two new organizations, the University Women's Glee Club and University Choristers, have come into existence, and various new courses have been organized to make the work more efficient.

The entire thought of the Faculty in this connection has been to afford the utmost opportunity to all students of the University to acquire the most complete musical knowledge and experience possible, and to train young men and women who might become leaders of musical enterprises in their communities. On this account the degree of Bachelor of Music has been based upon a general culture with music as the nucleus rather than upon a specific professional course which should turn out concert artists. The aim has been to make teachers and leaders rather than concert performers, although there is no doubt that the standards of performance demanded of the graduates of the School are higher than they were three years ago.

So far as the future is concerned, the past has pointed the way to what must now be attempted. To do more rather than less for the State of Illinois, is the present aim. Thruout the State there is an urgent demand for young men and women in the public schools who may work out the musical salvation of their communities. Accordingly, everything possible is being done to strengthen the Public School Music course and to direct the attention of the more serious students to the possibilities and demands of community music. As the facilities increase and the faculty becomes larger, it is hoped that there may be added some theoretical work which at present must be omitted, some of an advanced nature, and also some of an elementary kind to supply the deficiencies of those high school students who have come from the more backward communities. Eventually it may be possible to include graduate work, especially in the history of music and composition, and to this end the library of the School is being built up. The strategic situation of the University of Illinois and the rapidly increasing importance of the Twin Cities as a music center will soon bring to the School a large number of the more desirable music students who will make its musical



Library Addition



Armory



Auditorium



Men's Gymnasium



President's House



Law Building

life more vigorous and more varied. To sacrifice the individual character of the School would be a most serious mistake. Rather must it be developed along the lines of state service and inspirational leadership. Possibly at some time it may be wise to incorporate in the School of Music a department of community music with a vigorous and experienced leader. Such a department could be of use on the campus as well as elsewhere.

9. THE COLLEGE OF EDUCATION

Courses in Education and Psychology have been offered at the University of Illinois, under various names, for nearly every year since the University was organized. The second catalog of the University announced a course in "Mental Philosophy, three lectures a week," and a course in "Science of Education, or Mental Philosophy applied to education, two lectures a week."²³ "The Philosophy of Education" was one of the topics listed in 1870-71 as comprising the work in "Philosophy and Logic" for that year.²⁴ With slight modifications the same announcements for the department of Mental and Moral Philosophy were repeated up to and including the year 1889-90. In 1890 a professor of Psychology was appointed, who served for one semester. An assistant professor of "Psychology and Pedagogics" was appointed in 1892, and for the following year rather extensive offerings in these subjects were announced. A full professorship in "Pedagogics" was established in 1893. Three years later a new appointee to an assistant professorship in "Pedagogy" was given also the title of High School Visitor and assigned the duties of that position.

The word "Education" displaced "Pedagogy" in the announcement of courses and in the title of appointees in 1900-01.

FROM 1904 TO 1918²⁵

By 1905 the work in Education had become so important that early in that year the Board of Trustees sanctioned the

²³Catalog 1868-9, p. 13

²⁴Ibid., 1870-71, pp. 58-9

²⁵The data contained in the following paragraphs is chiefly summarized from a special statement prepared by W. C. Bagley, Director of the School from 1909 to 1917

organization of a School of Education, with special reference to the preparation of teachers for secondary schools. A Senate committee appointed by the President of the University to study the question reported that in the judgment of the committee it was inadvisable to establish a school of education separate in administration from the existing colleges. It was recommended however that all members of the instructional staff of the University offering courses primarily intended for the preparation of high school teachers should be organized as a group, to be known as the Faculty of the School of Education, and that such persons should constitute committees from their respective colleges to represent those colleges in the faculty of the school.²⁶

The general suggestions contained in this report were adopted as a basis for the organization of the School of Education, and the School was formally announced in the University catalog of 1905-06.

During the fifteen years since the School was established a number of educators of national prominence have served in the School as members of the administrative or instructional staff. The first director, Prof. Edwin Grant Dexter, resigned in 1907 to accept the commissionership of education to Porto Rico. Dr. Edward O. Sisson, after serving as assistant professor in the School of Education for the year 1905-6 resigned to become head of the Department of Education in the University of Washington, later becoming Commissioner of Education of the State of Idaho. In 1908 Dr. William Chandler Bagley was appointed professor of education, and a year later was made director of the School. During his administration the School of Education of the University of Illinois assumed a place among the foremost schools of its class in the country. Dr. Bagley resigned in 1917 to join the Department of Education of Columbia University. Dr. Lewis Flint Anderson came to the School in 1909 as assistant professor of education. He resigned in 1914 to accept a professorship of education in the Ohio State University. While at the University of Illinois Professor Anderson had charge of the work in the history of

²⁶Rept., Univ. of Ill., 1906, pp. 40, 43, 62, 75

education. The Aron library, comprising 5,000 volumes and 10,000 pamphlets, and especially rich in materials concerning the development of education in Europe during the sixteenth, seventeenth and eighteenth centuries, was purchased upon his recommendation. He also began the development of a textbook library and an educational museum. Dr. Lotus Delta Coffman served as lecturer in the School for the year 1911-12, and as professor of education from 1912 to 1915. In the latter year he resigned to become Dean of the College of Education of the University of Minnesota.

In 1913 Dr. Charles Hughes Johnston, Dean of The School of Education of the University of Kansas, accepted a position as professor of secondary education at the University of Illinois. At the end of three years of distinguished service in this capacity, Professor Johnston met his death in an automobile accident in September, 1917.

Upon the resignation of Professor Coffman in 1915, Professor Joseph Clifton Brown was appointed principal of the training school, and placed in charge of the work in administration and supervision until the training school should be opened. He resigned his position at the University of Illinois, however, after one year of service, in order to become President of the State Normal School at St. Cloud, Minnesota.

In 1914 Dr. Guy Montrose Whipple was made associate professor of education and a year later was promoted to a professorship. His especial field at the University of Illinois has been that of educational psychology, including the closely related fields of mental tests, school hygiene and auxiliary education. In 1914-15 he established the laboratory of educational psychology. Dr. Whipple was granted leave of absence in June 1917, for the first semester of 1917-18 to enable him to carry on certain investigations at Pittsburgh in connection with the development of psychological tests. Dr. David Spence Hill, formerly director of the Newcomb School of Education and of the department of educational research in the public school system of New Orleans, was appointed at this time as acting professor of education for the first semester of 1917-18.

In March 1917 the Board of Trustees authorized the appointment of Dr. Werrett Wallace Charters, then professor of the theory of teaching and dean of the faculty of education of the University of Missouri, to be professor of education at the University of Illinois from the beginning of the academic year 1917-18.

On June 1, 1918, the Board of Trustees voted to erect the School of Education into a separate College of Education. Dr. Charters was appointed Dean, but he resigned this position to accept a research appointment at Carnegie Institute of Technology.

On June 21, 1919, Dr. Charles Ernest Chadsey, then Superintendent of Schools in the City of Chicago, was appointed Dean of the College of Education. He entered on his duties as Dean in September, 1919, but resigned on November 17, to resume his duties as Superintendent of Schools, on the receipt of notice that a suit to compel the city authorities to permit him to exercise the duties of the office had been decided in his favor. On November 26, he returned to the University and withdrew his resignation.

The chief emphasis during the fourteen years since the organization of the School of Education has been upon the advanced undergraduate and graduate courses. These have been increased and strengthened, and have attracted an increasing number of graduate students. There were only three graduate students majoring in education in 1903-04, none in 1907-08 and only two in 1908-09. But this number was increased to 11 in 1909-10, and the numbers since that date have been successively 15, 18, 24, 35, 35, 27, 25, 22, 19, and 20. In the summer sessions of 1916, 1917, 1918, and 1919, there were 47, 43, 35, and 35 graduate students enrolled, respectively, who were majoring in Education. The first doctor's degrees in Education were conferred in 1915, on two candidates.

The following table indicates the growth of class registrations in the School (and College) of Education since its organization:

CLASS REGISTRATIONS IN THE SCHOOL OF EDUCATION

Year	First Semester	Second Semester	Summer Session	Total
1905-06	103	128	..	231
1906-07	95	109	..	204
1907-08	80	79	..	159
1908-09	74	128	..	202
1909-10	127	167	..	294
1910-11	163	174	201	538
1911-12	149	180	190	519
1912-13	154	245	238	637
1913-14	291	336	348	975
1914-15	280	326	365	971
1915-16	412	444	457	1313
1916-17	460	479	345	1284
1917-18	393	395	295	1083
1918-19*	254—248—	222	3761	4485
1919-20	693	656	...	1349

Just prior to the legislative session of 1911, the School inaugurated a campaign for a building that would house a training school of secondary grade. The campaign was unsuccessful at this time, but the movement so clearly had the support of practically the entire body of public school teachers and administrators of the state, that, upon the appropriation by the Legislature in 1913 of the proceeds of the mill tax to the University, the Board of Trustees proceeded to acquire a site and to consider plans for such a structure. The erection of the building was repeatedly delayed, but actual construction was finally begun in 1916 and completed in 1919. Unfortunately the lack of funds has prevented the opening of the model school.²⁷

Since 1907 the School of Education has published a series of 19 bulletins comprising (1) reports of the annual high school conference and other meetings held at the University in the interest of education and (2) the results of special investigations and studies by members of the instructional staff and by students.

*Year divided into 3 quarters

²⁷See also Chapters II and III

Another important development in the School of Education has been the assumption and prosecution of the work of the University Committee on Appointment of Teachers. This Committee "recommends qualified graduates of the University for positions as teachers or supervisors in public schools, colleges and technical schools in response to requests from the school authorities."²⁸

Since 1914, the completion of certain specified courses in education, amounting to a total of seven hours, has been required of all students who desire to obtain upon their graduation the recommendation of the Committee on Appointments. This is a smaller number of hours of professional work than is required at most state universities, but it has been the policy of this College not to stress heavily the strictly professional work, but rather to insist that the prospective teacher should have first of all a solid basis in academic scholarship.

BUREAU OF EDUCATIONAL RESEARCH

By authority of the Board of Trustees the Bureau of Educational Research was organized in 1918, and Dr. Burdette R. Buckingham was appointed Director and Professor of Education.²⁹ The purpose of this Bureau is "investigating the problems of teaching and school administration, collecting information concerning the best educational practises of this and other countries, and placing the results obtained before the schools of this state."

10. THE COLLEGE OF MEDICINE

Perhaps no department of the University of Illinois has had so varied an experience during the past twelve years as the College of Medicine.³⁰

The University of Illinois did not organize a medical school at the beginning of its work in 1868. This was a great mis-

²⁸Univ. of Ill. Annual Register, 1917-18, p. 190

²⁹Minutes, Board of Trustees, 1916-18, p. 759

³⁰The following paragraphs are taken for the most part from a Memorandum and a History of the College of Medicine prepared by the President of the University in 1912

take from the standpoint of the interests of the commonwealth. There is no doubt that the average level of medical education in the state of Illinois would be much higher than it is today and the public health would be much more adequately conserved, if the College of Medicine had been established and properly supported at the time of the opening of the University.

During Governor Altgeld's administration, and largely upon his initiative, an attempt was made to incorporate medical teaching in the general university scheme by annexing to the University an existing medical school.

Following the earnest suggestion of Governor Altgeld, who had insisted that the people of Illinois desired that the University of Illinois should become a university in the fullest and completest sense of that term, the Trustees of the University, after long and careful deliberation, made, with the College of Physicians and Surgeons of Chicago, a contract of affiliation April 1, 1897, to go into effect April 24th of the same year.

Under this contract the College of Physicians and Surgeons turned over to the University the use of its plant in return for a specified rental. The University in co-operation with the faculty of the medical school which had been conducted by the College of Physicians and Surgeons took over the responsibility of managing the school, making it, for practical purposes, the medical department of the University of Illinois.

The trustees, however, did not assume any financial obligations for the conduct of this experiment beyond using the income from the fees of students and the gifts of private individuals for the support of the medical school. They simply agreed to manage it and make as good a school as they could with the proceeds arising from the sources mentioned.

The result was so satisfactory to both parties that a new contract of affiliation was made, to go into effect May 1, 1900. (It was modified in 1901.) Under this contract the College of Physicians and Surgeons as a corporation, with the consent of the Board of Trustees of the University, undertook to enlarge the plant, which had been used for the medical

school and which at that time consisted of the so-called Old College Building at the corner of Honore and West Harrison Streets, by purchasing the West Side High School building from the city of Chicago at a cost of \$186,000, and by remodeling it for medical purposes at a cost of \$60,000.

The attendance at the medical school had risen so rapidly during the first contract of affiliation that the parties to the contract thought it would be a perfectly feasible thing to pay the interest on money borrowed for the enlargement of the plant, conduct a satisfactory medical school and accumulate through an annual surplus a sinking fund sufficient to pay off the debts which had been contracted for the original plant and its enlargement—thus presenting the property to the State free of encumbrance.

Nothing can show in a more striking way the world-wide difference between the manner in which the American public viewed the subject of medical education sixteen years ago and that in which the public looks upon it today, than the conclusion of such a contract, made at that time with common consent and public approval.

Scarcely had the contract been signed, when the attendance at medical schools, which had been running up very rapidly thruout the country, began to decline quite as rapidly, through circumstances over which the schools, as such, had no control.

Two other things combined to make the plan which had been agreed upon by the University and the College of Physicians and Surgeons entirely untenable. The public in its own interest began to demand more rigorous requirements for admission to medical schools on the one hand; and on the other, a better grade of teaching and more adequate equipment in the schools themselves. Both of these worked against the possibility of continuing the contract of affiliation; for the requirement of higher standards of admission diminished the number of students and therefore the income, while the demand for better teaching increased the expense.

It became increasingly plain that without appropriations from the state legislature the University could not hope to conduct a medical school worthy of the name, and certainly it ought not to be connected with any other kind of school.

A request was therefore made of the legislature at the session of the 45th General Assembly, in 1905, for an appropriation to enable the University of Illinois to purchase the plant which it had leased from the College of Physicians and Surgeons, or to construct or acquire some other plant. The legislature appropriated by a large majority (thirty against six in the Senate; eighty-nine against forty in the House), the sum of \$386,000 for the purpose of acquiring by purchase or by construction, a medical plant.

The Governor vetoed this appropriation bill, along with several others, on the ground that the legislature had exceeded the amount of money available for appropriations.

Another attempt was made to carry on the medical department on the basis previously accepted. But it was again made evident that this could not be done.

In 1911, therefore, the University once more asked the legislature for an appropriation: this time an appropriation of \$100,000 per annum for the maintenance, extension and development of the medical school.

The legislature by a large majority (unanimous in the House and thirty to two in the Senate) granted sixty thousand dollars per annum, and the Governor signed the bill. However, certain persons who were opposed to the idea of state support in medical education, brought suit to set aside the appropriation on the ground that the provision of the constitution in regard to the passage of bills had not been strictly observed. The court sustained the contention and the University lost the money.

It became evident to the College of Physicians and Surgeons that the University would probably find it difficult to carry out the financial obligations involved in the payment of the lease, and it therefore gave notice to the Trustees of the University of Illinois that it would no longer lease its medical plant to the University of Illinois. Being thus deprived of the plant which it had been using for fifteen years and having no money with which to hire or construct another, the University was compelled to close its medical school; which it did on the 30th day of June, 1912.

The College of Physicians and Surgeons immediately opened a medical school in the same plant on the day after the University closed its medical school, and admitted the students of the University medical school to the new school.

This closing of the medical department of the University caused great consternation among the alumni of the medical department and in general among the friends of advanced medical education thruout the state. These latter immediately bestirred themselves in the matter, and finally, on August 23, 1912, asked the Trustees of the University whether they would accept the property of the College of Physicians and Surgeons if the alumni and other friends of medical education would secure the stock of the corporation and present the property to the trustees.

After mature deliberation, upon September 19, 1912, the trustees voted that they would accept the property if the stock should be delivered in a block on or before the first day of February, 1913.

On January 31, 1913, the chairman of the committee which had been entrusted with this work, presented to the president of the Board of Trustees of the University of Illinois, the entire stock of the College of Physicians and Surgeons. It had been acquired by the committee, partly through donations from the persons owning the stock, and partly through purchase with funds raised by private subscription among the friends of medical education.

Thus the conditions specified by the board were met and, therefore, at the meeting on February 12, 1913, the Trustees voted to accept the property of the College of Physicians and Surgeons, subject to the mortgage indebtedness resting upon the property amounting to \$245,000 with an interest charge of \$14,320, disclaiming at the same time all responsibility for the payment of such indebtedness.

The Trustees at the same time directed the President of the University to reopen the medical school in the plant thus acquired, which was done Thursday, March 6, 1913. At this time the deeds and bill of sale to the property, real and personal, and the stock, together with the charter belonging to

the corporation, were turned over to the Trustees of the University of Illinois and accepted by the President of the Board on their behalf.

The University of Illinois admitted to the medical school, thus reopened, the students of that school which the College of Physicians and Surgeons had established in the plant the day after the University had closed its school. Since then the University has conducted the school as an integral part of its organization, under the name of the College of Medicine of the University of Illinois.

In 1913 the faculty was reorganized and a considerable number of the most noted men in the profession were added to the instructional and the investigative staff.

In 1913 the requirements for admission to the College of Medicine were advanced to include a year of college work in addition to the completion of a four-year high school course. For the year 1914-15 a second year of college work was added as a prerequisite for entrance. At the end of the first two years of the four-year curriculum in Medicine the degree of Bachelor of Science is conferred; and at the completion of the curriculum, the degree of Doctor of Medicine.

The first year's work in Medicine may now be taken at Urbana.

The urgent need of the College of Medicine for a clinical building is about to be met by virtue of an agreement between the University and the State Department of Public Welfare, approved July 12, 1919, whereby the Department agreed to purchase land and to erect a group of hospitals in Chicago, and the University agreed to supply the staff officers, research workers, and clinical faculty for the hospitals and to turn over to the department the sum of \$300,000 specially appropriated by the General Assembly in 1919 for a clinical building.*

The hospitals and units to be constructed include:

The Illinois Charitable Eye and Ear Infirmary, to provide medical and surgical treatment for all indigent residents of Illinois who are afflicted with diseases of the eye, ear, nose, or throat.

*Minutes, Board of Trustees, 1918-20, pp. 487-409

The State Psychiatric Institute, for the study of the nature and treatment of mental disorders.

The Illinois Surgical Institute for Children, to furnish to indigent children, residents of Illinois, who are physically deformed, treatment, training, and education.

The State Institute for Juvenile Research, to provide for the study of the nature and treatment of behavior difficulties in minors.

The University Clinical Institute, for the study of the causation, prevention, alleviation, and cure of disease.

The University, through its College of Medicine is to have the use of the clinical facilities of said hospitals for teaching purposes and research work.

The University is to appoint and control the professional staff of the hospitals, physicians, surgeons, internes, laboratory technicians, librarians, and assistants for the treatment of patients and for teaching and research purposes. It shall control the work of the nurses, ward attendants, and all others in so far as this work is strictly medical.

The University is to provide courses of instruction in medical and allied subjects for workers in the Department, such as training schools for nurses, occupational therapists, social workers, dietitians, and others as may from time to time be agreed upon between the contracting parties.

The University is to consult with and advise the Department and the Department is to consult with the University as to the needs of the University for teaching and research facilities in the buildings erected or to be erected.

The state and the nation are largely indebted to Director Charles H. Thorne, of the Department of Public Welfare for the development of this plan, which will constitute one of the greatest endowments for medical education and research ever provided.

11. THE COLLEGE OF DENTISTRY

A School of Dentistry was organized by the University in 1901 as a department of the College of Medicine.³¹ In 1905

³¹Rept., Univ. of Ill., 1902, p. 54

the name of the School was formally changed to the College of Dentistry.³²

During the year 1912-13 the College of Dentistry was closed, by reason of the failure of the Legislature to appropriate funds for its maintenance. Up to that year the College had been supported by the income derived from fees, but these were found to be no longer adequate to make it possible to conduct a college of high grade. A year later the College was reopened, its support being provided for upon the same basis as are the other departments of the University.

The College of Dentistry occupies a six-story building on the corner of Harrison and Honore Streets in Chicago.

In 1904 the completion of one year of high school work was required for admission to the College of Dentistry. During the next sixteen years the requirements for entrance advanced to include the completion of fifteen units of preparatory work in an accredited high school or academy or a state normal school.

During the same period the course of study was revised and improved, additions were made to the equipment of the laboratories and the operating rooms, and the faculty strengthened in numbers and in personnel.

In spite of the general decrease in the number of students enrolled in medical and dental colleges within the past few years, the enrolment of the College of Dentistry of the University of Illinois increased from 163 in 1906 to 196 in 1920, a gain of 33, or about 20 per cent.

12. THE SCHOOL OF PHARMACY

The School of Pharmacy was established in 1896. In that year the Chicago College of Pharmacy which had been founded in 1859 offered to turn over to the University all its property on the condition that the University would accept the gift and maintain the School as a branch of the University. The offer was accepted and the transfer accomplished May 2, 1896.³³

In 1904 the School was removed to the corner of Michigan Boulevard and Twelfth Street where it occupied the four upper

³²Ibid., 1906, p. 61

³³Rept., Univ. of Ill., 1896, pp. 238, 240

floors of a building having a frontage of 50 feet on the boulevard and a depth of 170 feet, until June 1916. In that month it was removed to a building just previously purchased by the University at the corner of Wood and Flournoy Streets.

To meet the demand for special training on the part of students desiring to pursue more extended courses in pharmaceutical chemistry, applied microscopy and bacteriology, or to prepare themselves for positions under the Food and Drugs Act, a curriculum was established in 1908 leading to the degree of Pharmaceutical Chemist. This curriculum includes all the didactic instruction given in the shorter curriculum, but embraces certain additional subjects and a considerably larger amount of laboratory work.

For the year 1904-5 the entrance requirements for the School of Pharmacy consisted of the completion of a grammar school course. From 1908 to 1913, one year of high school work was required for enrolment as a candidate for the degree of Graduate in Pharmacy. This requirement was raised in 1914 to the completion of two years' work in an accredited high school, and since 1916 15 units have been required. For admission to the curriculum leading to the degree of Pharmaceutical Chemist 15 units have been required since the establishment of this curriculum in 1908.

The enrolment in the School of Pharmacy for the year 1896-7 was 181. In 1903-4 the number was 185. During the sixteen years from 1904 to 1920 the number varied considerably from year to year, ranging from 150 in 1904-05 to a maximum of 259 in 1907-8. In 1919-20 the total number of students enrolled was 209.

13. THE SUMMER SESSION

A summer session, as a part of the work of the University, was given consideration by the faculty and the Trustees as early as 1892,³⁴ but the experiment was first tried in 1894. In that year thirty students were enrolled. For the following summer there were but twenty-seven students enrolled, and

³⁴Rept., Univ. of Ill., 1892, p. 199

the Director of the session in his report to the Trustees, the following September, expressed doubt as to the advisability of its continuance.³⁵

It was not until 1899 that an attempt was again made to hold a session during the summer. Upon the receipt of resolutions of the Southern Illinois Educational Association and a petition from teachers in southern Illinois for vacation work at the University, the question of reestablishing a summer term was again given consideration, with the result that plans were made for a session of nine weeks for the summer of that year.³⁶ This session was distinctly successful, a total of 148 students being enrolled.

The summer terms were continued and by the summer of 1904 the number of students had reached 238. During the past sixteen years there has been an almost constant annual increase in the enrolment, the number in 1916 being 1,147, a gain of 909, or over 380 per cent for the period. For 1917, because of conditions arising from the War, the enrolment fell to 833. In 1919, the total rose to 1,314 students.

The purpose of the summer session is thus stated in the bulletin for 1920:³⁷

"The Summer Session is an organized integral part of the University year. Though its organization is not subdivided into colleges, numerous courses are offered by departments in the Colleges of Liberal Arts and Sciences, Commerce, Agriculture, Engineering, and in the School of Music and the Library School. All courses may be counted toward an A.B. or B.S. degree, or toward a master's degree, unless otherwise specified. By two Summer Sessions a regular student may reduce the eight semesters to seven, thus securing his degree a half year earlier than he would otherwise have done.

"One of the primary purposes of the Summer Session is to meet the needs of the teachers in the public schools who wish to spend a part of the summer vacation in serious study or investigation. Numerous courses are designed particularly for

³⁵Ibid., 1896, p. 165

³⁶Ibid., 1900, pp. 28, 52

³⁷Univ. of Ill. Bulletin, Vol XVII, No. 20, p. 7

high-school teachers, supervising officers, teachers of special subjects (agriculture, art, household science, manual training, music, etc.), and coaches of athletic teams; graduate courses are offered for college instructors, school supervisors and principals who are working for advanced degrees.”

A comparison of the foregoing statement with that contained in the summer session bulletin for 1904 reveals the fact that in 1904 a part of the courses offered were for students who were preparing to enter the University, or who wished to do work of a preparatory grade in order to remove entrance conditions; whereas in 1920 the work offered was with very few exceptions of a strictly collegiate or university grade. This fact is further indicated by a comparison of the requirements for admission at the two periods. The announcement of the 1904 session stated:³⁸ “No examinations or other conditions will be placed upon admission. All who can do the work are welcome to get what they can from it. Those who can meet the requirements may matriculate in the University if they desire, and in that event, upon examination, may receive credits to apply upon regular University courses.” For admission to the 1920 session the requirements were substantially the same as those in force during the regular school year.

The tuition fee for the summer session has remained the same throughout the sixteen years from 1904 to 1920. In 1904, however, no free scholarships were available to students. At a meeting of the Board of Trustees held January 17, 1905, the President presented a request from the Director of the Summer School, that a free scholarship in the summer session of 1905 be offered each accredited high school in the state. It was voted that a free scholarship should be granted to some representative of as many high schools in the state as the President of the University should deem wise.³⁹ A similar request for the summer session of 1906 was approved by the Trustees December 19, 1905.⁴⁰ At a meeting of the Trustees held June 27, 1906,⁴¹ it was recommended that in connection with the

³⁸Univ. of Ill. Bulletin, April 1, 1904, p. 167

³⁹Rept., Univ. of Ill., 1906, pp. 37-38

⁴⁰Ibid., p. 295

⁴¹Ibid., p. 385

summer term to be held in 1907, "the University establish a free scholarship (a) for all persons who have taught during the year 1906-7 in the high schools of the State of Illinois; and (b) for all other persons who have taught in the schools of Illinois during the year 1906-7, and who may be able to qualify for full admission to the University in either of the Colleges, Literature and Arts, Science, or Engineering." The recommendation was approved by the Board, and the scholarships have up to the present time been granted annually on the same conditions. In addition, summer session scholarships have been granted since 1910⁴² to those persons (otherwise qualified) who have contracts to teach during the following school year and to those who graduate from the various state normal schools in Illinois in June of the year in which the summer session is held. As a result of these endeavors of the University to promote the general educational interests of the state, about half of the total number annually enrolled in the summer session consists of high school and public school teachers of Illinois in active service.

The summer sessions have grown in strength and value year by year. In 1904 the faculty consisted of thirty-three members; in 1919, of one hundred and fourteen. There were three visiting professors from other universities who gave regular courses in 1904, and five in 1919. The relative strength of the faculty in these two years may be seen from the following table:

FACULTY IN SUMMER SESSION

1904 AND 1919

	1904	1919
Visiting Professors	3	5
Resident Professors	3	26
Associate Professors	..	3
Assistant Professors	10	19
Associates	..	18
Instructors	16	25
Assistants	1	15
Lecturers	..	3
Total	33	114

⁴²*Ibid.*, 1910, p. 545

The number and variety of the courses offered in the summer session of 1919 showed a marked increase over those offered in 1904. Opportunity was given in 1904 for work in twenty different departments; and in the 1919 session, in thirty-seven departments.

In addition to the regular courses of instruction offered in 1904, several general lectures were delivered by visiting educators. These comprised five on the Monroe Doctrine, five on English literature, and twenty-five on the principles of education. In 1917 the incidental exercises of general interest were of a varied nature. Forty-eight general lectures were given by members of the regular staff and by visiting educators; sixteen on recent advances in physics; eleven on recent history, with special reference to the war; two on food conservation; five on the teaching of English; three on stars, nebulae and eclipses; two on birds and bird music; one on the Near East; and the others on various topics. The Coburn players gave three open-air performances; there were two convocations, five recitals, seven vesper services, seven "campus sings," and several conferences of teachers, principals and superintendents.

GRADUATE WORK IN THE SUMMER SESSION

A recent feature of the summer session work especially deserving of notice is the increased opportunity afforded students for pursuing graduate study and securing the degree of Master of Arts. Thus the announcement for the 1920 session⁴³ stated that:

"In recent summer sessions the University has placed increasing emphasis upon graduate courses leading to the Master's degree. The departments which are closely related to high-school teaching and to educational administration have been selected as the centers of this emphasis. An attempt is made to vary the graduate offerings from year to year so that advanced students who attend the University summer after summer may continue to find acceptable work in their chosen fields.

"Graduate students in the Summer Session are subject to the same scholastic requirements as those in the regular Uni-

⁴³Univ. of Ill. Bulletin, Vol. XVII, No. 20, p. 10

versity year. *Their study lists must be approved by the Dean of the Graduate School, or his representative, in 109 Commerce Building.* Attendance on four summer sessions, or one semester and two summer sessions, is considered the equivalent of one year in residence. If in these sessions the required amount of work is properly done a master's degree may be earned in this way.

"No course offered in the Summer Session may be taken for credit towards a higher degree unless it is specially described in the Summer Session circular as accepted for that purpose.

"Students working for their masters' degrees in the Summer Session must announce their thesis subjects not later than the beginning of their third session in residence.

"Graduate courses in medical sciences are offered in the summer quarter between June and September at the College of Medicine of the University of Illinois in Chicago."

SUMMER COURSES IN LIBRARY TRAINING

During the first six weeks of the summer session since 1911 the Library School has offered a series of courses in Library training. These are not given in connection with the regular summer session of the University, but as an independent undertaking of the Library School.

To this course are admitted "only high school graduates actually employed as librarians, or library assistants, or teacher-librarians, or under definite appointment to serve in such position." The curriculum is planned to meet especially the needs of workers in public libraries and in high school libraries of Illinois and no tuition fee is charged students entering from this State; students entering from libraries in other states pay a tuition fee of \$12. The work is under the general direction of the faculty of the Library School, and the instruction is given by members of the faculty, supplemented by lectures by neighboring librarians. No university credit is granted for this course.

"The work is designed to occupy the whole time of the student. The number of lectures in each subject is approximately as follows: cataloging, 20; classification and book

numbers, 13; book selection, 14; administration of small libraries, 10; reference work, 10; work with children, 10; loan systems, order, accession and shelf work, binding and repair, 13."⁴⁴

Up to the present time 229 persons have availed themselves of the privileges afforded by the summer library courses, of whom 161 were from Illinois libraries:

SUMMER WORK AT HAVANA

In the summer of 1910 an interesting experiment was tried. It consisted of furnishing instruction in certain sciences at the Illinois Biological Station at Havana, Illinois. The students at the Station had as their field of observation "the banks and waters of the Illinois River itself, a series of lakes, streams and bayous of the vicinity, and the bottoms, bluffs and uplands adjacent, presenting a great variety of situations unusually rich in all plant and animal forms, and convenient of access from the station grounds."⁴⁵

The work was carried on under the direction of a faculty of twelve members. Eight courses were offered in botany, three in education, one in microscopical technique, two in physical geography and six in zoology. About sixty students were in attendance during the session.

THE SCHOOL FOR ATHLETIC COACHES

In connection with the summer session of the University, the department of physical training for men has since 1914 held a School for Athletic Coaches. This School was designed primarily to give instruction in the best methods of coaching the most popular competitive sports in college and high school—baseball, football, basketball and track and field athletics. In addition a course of instruction on playgrounds and their direction is provided.

The instruction in each course includes both theory and practical demonstration. The instructional staff is composed of the men in charge of the several athletic teams of the Uni-

⁴⁴Univ. of Ill. Bulletin, Vol. XIV, No. 34, pp. 16-17

⁴⁵Univ. of Ill. Bulletin, Vol. VII, No. 12, Nov. 21, 1909

versity. As many as two hundred fifty persons have been enrolled in one or more courses in a single year.

14. THE MILITARY DEPARTMENT INCLUDING ALSO THE UNIVERSITY'S PART IN THE WAR

In 1904-5 the military department of the University registered a total of 844 men, of whom 41 were officers. There was one regiment of infantry, composed of field staff band, and ten companies. There was also an artillery company.

The military department of the University registered a total of 2,217 students in 1915-16, 2,279 in 1916-17, 1,285 in 1917-18, 3,385, in 1918-19, and 1,407 in 1919-20. During 1915-16 and the first semester of 1916-17 the military organization consisted of two regiments of infantry, composed of twelve companies each; a foot battery of artillery, a signal company, an engineer company, a hospital company, two bands, a trumpet and drum corps, and a reserve band.

At the beginning of the second semester of 1916-17 an infantry unit, a signal unit and an engineer unit of the Senior Division, Reserve Officers' Training Corps, were established in accordance with the National Defense Act of June 3, 1916. The present organization is therefore as follows: One infantry unit, Senior Division, R. O. T. C., composed of two regiments of three battalions of four companies each, two headquarters companies, two supply companies and two machine gun companies; a band for each regiment and a reserve band; one signal unit, Senior Division, R. O. T. C., consisting of one company; and one engineer unit, Senior Division, R. O. T. C., consisting of one company.

Up to and including the year 1915-16 there was but one commissioned officer of the United States Army stationed at the University. In 1916-17 there were five commissioned officers, three non-commissioned officers from the active list and four retired non-commissioned officers assigned to duty here. Shortly after the declaration of war all of these officers except those upon the retired list were ordered to various training camps. In addition to the enlarged personnel of United States officers the Military Department has found it necessary to em-

ploy the services of several cadet officers. In 1917-18 seventeen such officers were appointed assistants in Military Science as against three in 1904.

Expenditures on account of military have greatly increased in the last sixteen years. During the biennium 1913-15 approximately \$227,920 was expended upon a new armory. To complete it will require at least \$250,000 more. "For incidental expenses, military scholarships, for the Armory and other buildings to be used by the military, an amount about equal to the original federal grant (\$600,000) to the University has been expended by the state to build up the Military Department of its University."⁴⁶

In addition to this work in military tactics, which the Morrill Land Grant Act of 1862 expressly included as one of the subjects to be taught in the land grant colleges, the University contributed materially to the preparation undertaken by the federal government for active participation in the war. Upon the entrance of the United States into the War, the President of the University telegraphed to the Governor of the State offering the use of the scientific laboratories and other equipment of the University to the Federal Government. This offer was promptly acknowledged by the President of the United States, and various demands were made on the resources of the University in consequence.

MILITARY UNITS AND COURSES

Perhaps the University's most direct contribution toward this end has been in organizing units and courses specifically military in character.

In 1915 a battery was organized among the faculty and students of the University which became known as Battery F of the First Regiment of Illinois Field Artillery. On June 20, 1916, the battery was ordered to entrain for Springfield from whence it moved to Texas. Almost exactly a year later, June 29, 1917, it again received orders from the Central Department directing immediate mobilization for active service,

⁴⁶Response of the University to the Call of War by Dr. B. E. Powell, University of Illinois Bulletin No. 52

and on July 10 it left Champaign, this time to begin preparation for overseas service. Four months later it arrived in France.

On July 2, 1917, ambulance units 109, 110 and 111, consisting of 36 men each, and recruited at the University in response to a call from the War Department, entrained for Allentown, Pennsylvania, to go into an army training camp prior to departure for France. Of the 108 men in these units 88 were Illinois alumni or students.

In the period from April 23 to June 28, the University offered special courses in Business Organization and Operation designed to prepare students for the Ordnance and the Quartermaster Corps. These courses enrolled in all about 120 students, the majority of whom promptly enlisted in the Federal service after completing this work.⁴⁷

The most extensive military instruction undertaken up to June 30, 1918, was that given in the School of Military Aeronautics, the organization of which was authorized by the Board of Trustees on May 1, 1917. The University had already begun work in this field, having established a chair of Aeronautics in 1916. From May 20, 1917, the Government sent to the School each week a group of men enlisted in the Aviation Corps. The course of study first prescribed for these men was of eight weeks duration, but in March, 1918, the Government extended this period of study by four weeks and doubled the weekly class enrolment. The curriculum at this time included such subjects as the construction and operation of machine guns and aircraft engines, the rigging of airplanes, artillery observation, wireless telegraphy, map reading, reconnaissance, meteorology, astronomy, contact patrol, bombing, cross country flying, theory of flight, types of machines, military law, military hygiene and sanitation, infantry drill regulations, army regulations, paper work, military organization, the latter subject including the form of the present German, British, French and American armies. Upon completing this work cadets were trained in the actual use of the airplane at the various aviation flying fields.

⁴⁷Response of the University to the Call of War by Dr. B. E. Powell, University of Illinois Bulletin No. 52

When the School opened, the Armory was placed at its disposal, and men were quartered as well as instructed there. Later, the Y. M. C. A. building was equipped for a permanent barracks, and when it would no longer accommodate all the cadets, the Women's Residence Hall was turned over to them. This was on November 15, just a few days after the building had been completed.

On February 16, 1918, the President presented to the Board of Trustees a request from the Federal Board for Vocational Education, asking the University to undertake the education of conscripted men from the army of the United States, as mechanics. The Trustees gave him authority to co-operate with the Federal Board in this matter, and it was immediately announced that the University would undertake to provide training in any mechanical line which the government desired, for five thousand men. This action on the part of the University resulted in the establishment of the Students Army Training Corps in the autumn of 1918.

In addition to the instruction already mentioned, several so-called war courses were introduced during the second semester of 1917-18, and of these perhaps the largest was that given in Red Cross work. The course extended from April 23, to June 1, and enrolled 140 students. It was conducted by a registered Red Cross nurse, by members of the faculty, and by practising physicians, and included instruction in first aid, surgical supplies, home nursing, field problems and dietetics.⁴⁸

STUDENTS' ARMY TRAINING CORPS⁴⁹

The Students' Army Training Corps was organized by the Committee on Education and Special Training, a committee of the War Department, composed of army officers and civilian educators, created for the purpose of educating and training men for service in the United States Army. Units of the S. A. T. C. were established in five hundred and fifty universities, colleges, and schools throughout the United States. The mini-

⁴⁸Response of the University to the Call of War by Dr. B. E. Powell, University of Illinois Bulletin No. 52

⁴⁹Annual Register, 1918-19, p. 425

mum number of students required was two hundred, and the maximum thirty-five hundred. The corps was divided into two sections, class A, those who received an academic education, and class B, those who received instruction in mechanical trades. The necessary educational requirements for class A students was a certificate of graduation from some high school of merit and for class B students a completion of the eight grades in grammar school.

The S. A. T. C. Unit established at the University of Illinois was class A entirely. It was organized October 1, 1918, and work started immediately. The induction of the men into the service began October 6, 1918. The Unit was organized into fifteen companies of two hundred men each, and eleven hours weekly were devoted to military drill and instruction.

The men were fully equipped, and regularly enlisted in the United States Army. They were under strict military discipline at all times. The study was supervised by the military authorities and was made compulsory.

In order to subsist and quarter such a large number of men, the University of Illinois went to great expense in completely flooring the Armory and installing a modern kitchen which contained the most improved equipment, such as steam tables, ranges, boilers, meat and bread slicers, and electric dish-washers. This work was delayed somewhat on account of embargoes at that time on the transportation of materials, but through persistence and untiring energy on the part of the University Executive Department every obstacle was overcome and this vast undertaking began to function in time to take care of the men as rapidly as they reported.

There were twenty-six hundred students enrolled in the Army section, four hundred in the Navy section, in Urbana, and three hundred and eighty-five in the University of Illinois College of Medicine at Chicago.

The academic courses were divided into groups and the curriculum arranged so as to cover subjects of value to the various arms of the service, and the men could elect the group or course of study desired.

Those eligible for admission into the S. A. T. C. had to be over eighteen years of age and under twenty-one. Induction

was made by the voluntary application of the man to his local board, and this was completed by the board of transfer after the man had passed a thoro physical examination by army surgeons.

Organization had been completed and the men were rapidly developing into valuable material for the Army, and several hundred students had already been transferred to the various Central Officers' Training Schools when the armistice was signed, shortly after which orders were received to demobilize; and this was done December 21, 1918.

WAR SERVICE RECORDS

Early in 1917 the University authorities were confronted with a difficult problem. Students had become restless and were manifesting a growing desire to participate actively in the war. During the spring 1,262 of them withdrew to engage in war work of one form or another. In the face of this situation it became evident that some action would have to be taken in order to provide credit for those courses successfully pursued to the date of the student's withdrawal. Accordingly the Council of Administration on April 17 passed these two important rulings:

(1) If any member of the senior class now in line for graduation enters upon specific service for the national defense, approved by a special committee of the Council of Administration, he shall be given credit for the full semester's work and shall be recommended for graduation.

(2) Any other student who enters upon specific service for the national defense, approved by a special committee of the Council of Administration, shall be given full credit for the semester's work in all courses in which he has been doing passing work at the time of his leaving; in other courses he shall be marked "withdrawn."

The following statement summarizes the participation of the University's graduates, students and faculty in the military and naval service to June 5, 1918.⁵⁰

⁵⁰Report of University War Committee, Univ. of Ill. Bulletin No. 49, p. 6.

DISTRIBUTION THRUOUT THE DIFFERENT ARMS OF
THE SERVICE

ARMY	3,599	90.1%
NAVY	350	8.8%
MARINES	43	1.1%

DISTRIBUTION THRUOUT THE VARIOUS BRANCHES

ARMY

Ambulance Corps	117	Machine Gun Corps	39
Aviation Corps	522	Medical Corps	173
Cavalry	18	Musicians	15
Coast Artillery	160	Officers' Schools	207
Engineering Corps	296	Ordnance Corps	175
Field Artillery	364	Quartermaster Corps	173
Gas Defense Service	24	Signal Corps	107
Infantry	632	Branch Unknown	477
Total			3,599

NAVY

Radio Corps	48
Other Branches	270
Officers' Schools	32
Total	350

MARINES	43
-------------------	----

Grand Total	3,992
-----------------------	-------

How liberally Illinois faculty and students subscribed to the Government Loans and the War Relief campaigns, may be judged from the following table which lists the most important of those drives conducted in the University district between April, 1917 and June, 1919.

It is interesting to note that the University of Illinois held third place among ten representative institutions thruout the country in its subscription to the Third Liberty Loan. In total subscriptions it was surpassed by Chicago and Yale. However, its faculty subscription not only doubled that of the Chicago faculty but exceeded the faculty subscription in each of the other institutions.

Date	Campaign	Appor- tioned	Amount Subscribed	Oversub- scribed
April, 1917	Belgian Children Relief Fund..	\$ 6,000	\$13,625.02	127%
April, 1917	University Ambulance Fund...		10,000.00	
October, 1917	Second Liberty Loan.....		55,000.00	
November, 1917	Y. M. C. A. Army Fund.....	20,000	28,960.88	44.8%
To January 1, 1918	Red Cross Subscription.....		3,800.00	
1917-18	American and Syrian Relief...		5,928.09	
February, 1918	War Savings Stamps.....		25,000.00	
April, 1918	Third Liberty Loan.....	100,000	220,000.00	120%
May, 1918	Second Red Cross Fund.....	4,000	10,581.23	164.5%
November, 1918	Fourth Liberty Loan.....		314,000.00	
November, 1918	United War Work Fund.....		46,821.00	
January, 1919	Armenian and Syrian Relief...		2,514.36	
April, 1919	Victory Loan		86,300.00	
Total subscribed			\$822,530.58	

Since there was no apportionment of the University district for the First Liberty Loan this item does not appear in the above table.

Mention should be made of the work carried on by the Woman's War Relief Committee, the most active and successful student organization canvassing the University for funds in connection with the war. From the money which this committee collected during the year 1917-18, it made donations to the amount of \$2,031.23.

MISCELLANEOUS ACTIVITIES

Aside from its organization of military units and courses, as well as its subscriptions to the various campaigns enumerated above, the University made other contributions which, though less extensive and direct, were distinctly valuable in promoting the work of national defense. Of these perhaps the one most outstanding was the preparation of certain chemicals indispensable for the manufacture of munitions, nickel steels, etc. The stocks of many organic chemicals which were imported from Germany before the war had been completely exhausted, and during the year 1917-18, more than 100 different chemicals were made. Among the most important of

these may be mentioned dimethylgloxine, nitroso betanaphthol, cuperron, nitron and ninhydrin. At the outset it was thought that the business resulting from the sales of these products would amount to about \$1,000, whereas during the summer of 1917 alone, the sales totaled approximately \$5,000.

On March 3, 1917, a branch of the Intercollegiate Intelligence Bureau was organized at the University of Illinois, with Assistant Dean H. W. Miller of the College of Engineering as Adjutant. The purpose of this Bureau was to create machinery which would operate to bring all the existing college and university agencies into direct contact with the proper Department of the National Government without duplication of effort. Questionnaires were promptly sent to 13,500 alumni and students, and the information received from these was placed upon permanent record cards under 102 general heads. Within 30 days after the U. S. declared war, 3,860 of these cards were upon file and ready for use. To the first emergency case from the United States Civil Service Commission, Illinois responded with a good list of names, and several men immediately began their work in the positions offered. Urgent calls then came from the Ordnance Department for trained inspectors, clerks and instrument men. On May 9, 1917, the Bureau was asked to recruit from the University two ambulance units, and on May 26, an additional unit was called for. It was about this time that the University organized its School of Military Aeronautics, and since the undertaking demanded the services of those connected with the Intercollegiate Intelligence Bureau, the activities of the Bureau were greatly decreased during the summer months. However, in the latter part of August, the Government announced that it would increase its programs in aviation, shipbuilding, ordnance, chemistry and finance; and so during the winter of 1917-18 Adjutant H. H. Jordan, who in August replaced Professor Miller, found a renewed demand for the services of his Bureau. Registrants were supplied with information concerning the organization of the different National Departments and also the work which was being done at the officers' training schools. On March 15, 1918, the University was notified of the merging of the Intercollegiate

Bureau into the War Service Exchange which was then under the supervision of the Adjutant General's Office. Thereafter the co-operation of the University with the War Department consisted largely in classifying its graduates who intended to enter the service either as regular army or navy men or as civilians.

The extension division of the Household Science Department organized for a food conservation campaign. During the year 1917-18 the division served 20 types of organizations throughout the state reaching through them more than 70,000 housekeepers. The campaign which has been launched by this division was carried on locally since January 1, 1918, by a subcommittee of the University War Committee.⁵¹

On September 11, 1917, the Board of Trustees authorized the President to take out, on behalf of the University, a membership in the American University Union. The object of this organization was to furnish social facilities to graduates of American universities connected with the military and naval forces in Europe. In March, 1917, the Union asked the University of Illinois to contribute \$1,000 towards the support of the Paris Branch Union. The Trustees requested that the Alumni be invited to subscribe this amount, and accordingly the matter was turned over to the Chairman of the University War Committee. The campaign which was conducted under his direction netted in all \$1,506.50.⁵²

As the University continued to participate in an ever increasing number of war activities, it became evident that there should be some centralization of effort as well as a general supervision over all University agencies seeking to promote war work among faculty and students. Therefore, the Board of Trustees in December, 1917, authorized the appointment of a University War Committee whose duty it should be to coordinate and energize University war activities, to endeavor to place students and alumni where they could best serve the

⁵¹Response of the University to the Call of War by Dr. B. E. Powell, University of Illinois Bulletin No. 52

⁵²Report of the War Committee, University of Illinois Bulletin No. 49, p. 9

Government and to give the proper publicity necessary to make the whole work efficient.⁵³

This committee, of which the Vice President of the University was made Chairman, organized at once 17 divisional committees and began its work. Under its direction 14 war leaflets were published, most of them in editions of 50,000. Beginning April 24, 1918, news bulletins were sent out every Saturday to approximately 450 newspapers of Illinois and adjoining states. By May 9, a total of 182 war talks had been delivered before various student organizations. Under its supervision the University on February 18, dedicated a service flag in recognition of those among its alumni and students who had been called to the colors. In addition to these specific activities noteworthy service was rendered by the divisional committees on legal advice to drafted men, conservation and economy and University war employment.

15. UNIVERSITY OF ILLINOIS PRESS

The University of Illinois Press was organized in 1918 to have charge of the work of editing, printing, and distributing the publications of the University.⁵⁴ Mr. Harrison E. Cunningham was appointed Director. An editorial office has been established and some printing machinery has been installed.

The University publishes through its departments and allied scientific bureaus and experiment stations 18 series of bulletins and circulars, besides the publications of the Graduate School, which are listed in another place.⁵⁵ Among the noteworthy books published by the University are: *Konungs Skuggsjá*, the main manuscript of, by Professor G. T. Flom; *The Genus Phoradendron*, by Professor William Trelease; *The Life of the Pleistocene*, by Mr. Frank C. Baker; *The Life of Columelle*, edited and translated by A. O'Kelleher and G. Schepperle; *The Power of a God*, by Thacher H. Guild; *Semi-Centennial History of the University of Illinois*, volume 1, by Dr. B. E. Powell.

⁵³Min., Bd. of Trustees, Univ. of Ill., 1916-18, p. 636

⁵⁴Min., Bd. of Trustees, 1916-18, p. 747

⁵⁵Page 200 (this book)

CHAPTER X

SUMMARY AND CONCLUSION

During the sixteen years from 1904 to 1920 the income of the University of Illinois from the Federal Government rose from \$74,223.37 in 1903-4 to \$218,154.44 in 1919-20. The appropriations of the State of Illinois to the University advanced from \$1,152,400 to \$5,348,000. The total available income of the University increased from \$956,472.80 to \$3,723,746.18.

The University was the recipient of several important gifts during this period, the two most notable of which were received from Captain Thomas J. Smith and from Hon. William B. McKinley, both of Champaign. The former donated to the University four farms in 1914, having a total area of about 770 acres and a value of approximately \$215,000, to provide funds for the erection of a building for the School of Music. Mr. McKinley in 1917 presented to the University securities of a par value of \$120,000, from the sale of which funds should be provided for the erection of an infirmary for students and faculty.

The land holdings of the University increased during this period from 633.69 acres in 1904 to 1,959.45¹ acres in 1920. Of the 1,328.26 acres added, 713.72 acres were included in thirty experiment fields in various sections of the state which had been acquired by gift or by purchase. The total value of the land acquired during the period was \$861,887.29.

Sixteen important buildings were erected between 1904 and 1920. The total number of buildings in use by the University increased from 23 to 71. One million, one hundred fifty-three thousand, three hundred ninety dollars had been expended up to 1904 on buildings in use at that time. From 1905 to 1920, \$3,905,963.63 was spent for new buildings or for additions to old ones.

The inventory of furniture and fixtures in 1904 amounted to a total of \$81,342.55. In 1919 the value of these items was

¹See foot-note, Chapter II, p. 54

\$367,649.35. The value of departmental equipment rose likewise from \$487,117.16 to \$2,402,108.64.

The number of books in the Library increased from 66,239 in 1904 to approximately 420,000 in 1920. A considerable number of departmental libraries were established. Two new museums were established, and the other collections of the University received substantial additions.

The number of members in the faculty rose from 351 to 943. The quality of the staff showed an increase no less marked. Salaries were so increased that in 1919-20 approximately 36 per cent of the faculty were receiving \$2,500 or more, as against 10 per cent in 1903-04; while only .2 per cent were receiving less than \$1,000, as against 29.9 per cent in 1903-04. Four hundred ninety books, 5,478 articles, 310 book reviews and 490 book notices were published by members of the faculty during the sixteen years.

The enrolment of the University increased from 3,592 to 9,249, the number of degrees conferred, from 633 to 928 (1,223).² The requirements for admission were advanced for all departments of the University.

Student activities of every nature showed a lively growth during the period. Many organizations were formed to supplement the work in the class room, in addition to the large number devised chiefly for recreation. Illinois athletic teams were notably successful in inter-collegiate contests.

Of the various colleges and schools embraced in the organization of the University, nearly all showed a substantial growth during the period. There was in nearly every instance an increase in the number of students and faculty, in buildings and equipment and in the number and variety of the courses offered. In every case there was a distinct advance in the quality of the work.

During the sixteen years from 1904 to 1920 the University as a whole became recognized not only as an indispensable part of the great public school system of the State of Illinois, but as a most vital factor in the promotion of the agricultural, the industrial and the commercial interests of the common-

²Figures in parenthesis are those for 1916-17

wealth. It was repeatedly invited to assist in the solution of the most difficult problems which confronted the legislators of the State, and in every instance rendered ungrudging and efficient service. It cheerfully accepted whatever new duties were laid upon it. Its usefulness was limited only by its means.

In spite of the impression that will be derived from the study of the statistics presented in the foregoing pages—namely that the University's growth for the sixteen years was chiefly material and physical—it can be asserted with confidence that the real growth of the University for this period was intellectual and spiritual. It rose to a higher plane of scholarship. It came to lay greater emphasis upon unselfish service. There was a setting up of high ideals, and these were kept consistently before both faculty and students.

During this period the University was not content to serve only as a medium for handing down to its students the learning of the past. It strove with unflagging zeal to do its part in pushing outward the bounds of the known world of science, literature, art, philosophy and medicine. This policy, consistently followed, resulted not only in the addition of some small amount to the sum of human knowledge, but also in greater inspiration in the teaching of the instructor, and a keener interest in his work on the part of the student.

Difficult as the task is of securing the means for providing adequate land, buildings, libraries and laboratories, it is still more difficult to build up an able administrative and instructional staff—men with genuine teaching ability, with high ideals of scholarship, capable of carrying on important investigations themselves and of giving efficient direction to the research of others. This task has been performed at the University of Illinois during the past sixteen years with notable success. It is certain that no state university is ranked higher by its sister institutions at the present time than the University of Illinois. If the present high ideals of scholarship and of service are maintained, there is no reason to doubt that the University of Illinois will establish clearly its right to be counted one of the great seats of learning of the world.

BIBLIOGRAPHY

The principal sources from which the facts contained in this Report were collected are the following:

Reports of the Illinois Industrial University and the University of Illinois, 1868-1916.

Minutes of the Board of Trustees of the University of Illinois, 1904-1920.

University of Illinois Annual Registers, 1868-1920.

Laws of Illinois, 1863-1918.

Illinois School Reports, 1879-1906.

The Alumni Quarterly, 1907-18.

The Alumni Record, 1913-1918.

Registrar's Report, 1913.

Comptroller's Reports, 1913-19.

The Daily Illini, 1904-20.

The Illio, 1904-19.

INDEX

- Adams Act, 8, 11
 Administration building, picture, 16
 Agricultural College and Experiment Station, 211
 Agricultural Experiment Fields, 1920, picture, 53
 list, 70
 Agronomy Barn and Implement House, picture, 48
 Agronomy Greenhouse, picture, 48
 Animal Husbandry Feeding Barns, picture, 64
 Animal Husbandry Silos, picture, 64
 Appropriations
 entomologist, state, 18
 federal, 7
 Miners' and Mechanics' Institutes, 18
 Natural History Laboratory, 18
 state, 15, 17, 20
 Water Survey, 18
 Archaeology, Classical, Museum, 121
 Armory, picture, 224
 Artillery Barns, picture, 144
 Art Museum, 121
 Athletic coaches, school for, 244
 Athletic organizations, 182
 Auditorium, picture, 224
 Bibliography, 259
 Books and articles published by
 faculty, 152
 table, 153
 Botany Annex, picture, 96
 Buildings
 erected, 1867-1904, 78
 erected, 1904-20, 79
 description, 85
 inventory, 80
 under construction, 83
 Buildings and equipment, chapter on, 77
 Burrill, Professor, retirement, 144
 Cabinets and collections, appropriations, 1869-1911, 118
 Campus in 1870, picture, 44
 Campus, 1920, picture, 194
 Campus plans
 chapter on, 193
 chart, 196
 Ceramics Building, picture, 112
 Ceramics Kiln House, picture, 128
 Chemistry building, picture, 80
 Collections, 126
 Collections and cabinets, appropriations for, 1869-1911, 118
 Colleges and schools, chapter on, 199
 Commerce and Business Administration, College of, 214
 Commerce building, picture, 16
 Commerce museum, 126
 Conclusion and summary, chapter on, 256
 Contents, table of, 3
 Council of Administration, 1904-20, 130
 Dairy barns, picture, 64
 Debate and oratory, 190
 Degrees
 conferred, 1904 and 1918, table, 165
 conferred, 1905-19, table, 163
 geographical distribution, table, 170
 Dentistry, College of, 236
 building, picture, 208
 faculty, 143
 Departmental libraries, 107
 Dramatic organizations, 181
 Educational Research, Bureau of, 230
 Education, College of, 225
 building, picture, 160
 1904-18, 225
 Education, School of, registration, 229
 Endowment fund, interest, 19
 Engineering, College of
 alumni, 209
 changes, 210
 faculty, 208
 special activities, 206
 student enrolment, 208
 Engineering College and Experiment Station, 205
 Engineering Experiment Station, 207
 Enrolment
 colleges, etc., table, 160
 student, 1868-1920, table, 154
 student, 1904-20, table, 159

- Entomologist's Laboratory, picture, 96
- Entomologist, State, appropriation, 18
- Entrance requirements, 174
 - table, 175
- Equipment and buildings, chapter on, 77
- Equipment, inventory, 97
- Experiment fields, list and description, 70
- Experiment Station, Agricultural, 211
- Experiment Station, Engineering, 205, 207
- Faculty
 - additions, 1904-20, 130
 - chapter on, 128
 - salaries, 1903-04 and 1919-20, 148
 - table, 129, 130
- Farm Mechanics Building, 40
- Floriculture Greenhouse, picture, 96
- Foreign students, table, 171
- Fraternities and sororities, 184
- Furniture and fixtures, inventory, 96
- Gas Engine Annex, picture, 128
- Genetics Laboratory, picture, 96
- Gift of land, 76
- Gifts to the University, 29
- Graduate School, 199
- Gymnasium for Men, picture, 224
- Hatch Act, 7, 11
- Havana, summer work, 244
- Home-coming, 1916 program, 187
- Honorary and professional societies, 185
- Horse Barn, picture, 64
- Horticulture Field Laboratory, picture, 64
- Horticulture Greenhouse, picture, 96
- Hospital Annex, picture, 144
- Hospital, picture, 144
- Illustrations, table, 4
- Income
 - chapter on, 7
 - sources, 7
 - total, 29
 - total, table, 30
- Income from Federal Government, 7
 - summary, 11
- Income from State of Illinois, 15, 17
- Interscholastic, 1916 program, 189
- Introduction, 6
- James, President J. E., portrait, frontispiece
- Land
 - chapter on, 41
 - gift, 76
 - table showing value, 46
 - 1867, 41
- Lands acquired, list and description of
 - Chicago, 1868-1904, 64
 - Chicago, 1904-20, 69
 - experiment fields, 70
 - 1868-1904, 46
 - 1904-20, 48
 - outside Urbana-Champaign, 1904-20, 64
 - summary, 57
 - table showing value, 48, 52, 55
 - Urbana-Champaign, 1867, 59
 - Urbana-Champaign, 1904-20, 64
- Law, College of, 212
 - building, picture, 224
 - recent developments, 218
- Liberal Arts and Sciences, College of, 200
 - 1913-20, 202
- Libraries
 - departmental, 107
 - size in various universities, 102
- Libraries and museums, chapter on, 100
- Library
 - addition, picture, 224
 - building, 115
 - expenditure for books, 1912-18, 106
 - Quine, 114
 - 1904-18, 104
- Library School, 219
- Library training, summer courses, 243
- Lincoln Hall, picture, 32
- Literary and scientific organizations, 179
- Locomotive Testing Laboratory, picture, 128
- McIntosh, Professor, retirement, 145
- Mechanical Engineering Laboratory, picture, 128
- Medicine, College of, 230
 - building, picture, 208
 - faculty, 1904-20, 140
 - library, 114
- Military department, 245
- Military units and courses, 246
- Miners' and Mechanics' Institutes, appropriation for, 18
- Mining Engineering Museum, 126
- Mining Laboratory, picture, 112, 128

- Morrill Land Grant, 7, 11
 Museums, 116
 classical archaeology and art, 121
 commerce, 126
 mining engineering, 126
 natural history, 119
 Oriental, 124
 railway engineering, 127
 visitors, 123
 Museums and libraries, chapter on, 100
 Music, School of, 216
 building, picture, 160
 1904-20, 222
 1920, 223
 Natural History Building, picture, 32
 Natural History Museum, 119
 Natural History, State Laboratory of, 17
 appropriations, 18
 Nelson Act, 8, 11
 Observatory, picture, 144
 Oratory and debate, 190
 Organizations
 athletic, 182
 classes, 178
 dramatic, 181
 honorary and professional, 185
 miscellaneous, 186
 national and state, 186
 religious, 180
 Organizations and activities of students, table, 178
 Oriental Museum, 124
 Pharmacy, School of, 236
 building, picture, 208
 faculty, 144
 Physics Laboratory, picture, 112
 Power House, picture, 144
 Preface, 5
 President's house, picture, 224
 Press, University, 255
 Professional and honorary societies, 185
 Professors, 1904-20
 assistant, 136
 assistant, College of Medicine, 142
 associate, 135
 associate, College of Medicine, 141
 Dentistry, in College of, 143
 Medicine, in College of, 140
 Property
 sales of, table, 58
 summary, table, 58
 Publications
 faculty, 152
 faculty, table, 149
 student, 191
 Quine Library of College of Medicine, 114
 growth, 114
 Railway Engineering Museum, 127
 Religious organizations, 180
 Retirement of professors, 140, 145
 Ricker, Professor, retirement, 145
 Rolfe, Professor, retirement, 145
 Salaries
 average, of full-time member of faculty, 149
 faculty, 1903-04, 1919-20, 148
 summary, 149
 Schools and colleges, chapter on, 199
 Scientific and literary organizations, 179
 Senate, 1904-20, 131
 Shattuck, Professor, retirement, 144
 Smith-Hughes Act, 9, 11
 Smith-Lever Act, 8, 11
 Smith Music Building, picture, 160
 Societies, see organizations
 Sororities and fraternities, 184
 State appropriations to University, 15, 17, 20
 Stock Pavilion, picture, 48
 Store House, picture, 144
 Student body, chapter on, 154
 Students
 activities, 187
 enrolment of, 1868-1920, table, 154
 enrolment of, 1904-20, table, 159
 foreign, table, 171
 geographical distribution, 170
 graduated, percentage, 172
 insular possessions of U. S., from, 172
 organizations and activities, chapter on, 178
 parents of, occupations, 173
 publications, 191
 Students' Army Training Corps, 248
 Summary and conclusion, chapter on, 256
 Summer courses in library training, 243
 Summer Session, 238
 athletic coaches school, 244
 faculty, 241
 graduate work, 242
 Summer work at Havana, 244
 Table of contents, 3
 Tax for support of University, Act relative to, 27

- | | |
|--|--|
| Transportation building, picture, 112 | War service records, 250 |
| Vivarium, picture, 96 | Water Survey, State, appropriation, 18 |
| War activities, miscellaneous, 252 | Woman's Building, picture, 176 |
| War relief campaigns, subscriptions, 251 | Women's Residence Hall, picture, 176 |

